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(54) Title: <b>SECRETED EXPRESSED SEQUENCE TAGS (sESTs)</b>		
(57) Abstract  Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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## SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

FIELD OF THE INVENTION

5           The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

10           Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely  
15           to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

20           Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST  
25           library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-  
30           secreted "chaff", wasting effort and resources in the process.

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Co- [REDACTED] U.S. Patent No. 5,536,637, which is [REDACTED] incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted proteins,  
5 namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide  
5 comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In other embodiments, the present invention provides an isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

20 In further embodiments, the present invention provides an isolated polynucleotide  
 consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group

30 consisting of:

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NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID  
NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described  
5 polynucleotides.

### DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the  
Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each  
10 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.)  
followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

15	1	B11	21	C3	41	C639	61	D148
	2	B18	22	C32	42	C641	62	D154
	3	B21	23	C141	43	C642	63	D167
	4	B26	24	C143	44	C645	64	D179
	5	B40	25	C180	45	D4	65	D188
20	6	B115	26	C195	46	D7	66	D196
	7	B121	27	C293	47	D14	67	D200
	8	B124	28	C312	48	D15	68	D203
	9	B125	29	C539	49	D27	69	D233
	10	B142	30	C544	50	D68	70	D252
25	11	B196	31	C547	51	D69	71	D286
	12	B208	32	C571	52	D81	72	D303
	13	B224	33	C604	53	D100	73	D304
	14	B227	34	C607	54	D101	74	D305
	15	B232	35	C608	55	D104	75	D310
30	16	B236	36	C610	56	D105	76	D311
	17	B238	37	C617	57	D115	77	D318
	18	B255	38	C626	58	D121	78	D327
	19	C1	39	C627	59	D133	79	D329
	20	C2	40	C636	60	D143	80	E1

	81	E4	115	H291	149	J135	183	M141
	82	E5	116	H306	150	J143	184	M152
	83	E11	117	H383	151	J156	185	M194
	84	E12	118	H426	152	J168	186	M230
5	85	E14	119	H438	153	J297	187	M273
	86	E18	120	H541	154	J317	188	M292
	87	G1	121	H545	155	J322	189	M301
	88	G12	122	H657	156	J422	190	M313
	89	G16	123	H698	157	J435	191	M328
10	90	G20	124	H758	158	J509	192	M338
	91	G21	125	H770	159	J512	193	O7
	92	G26	126	H849	160	J532	194	O47
	93	G31	127	H920	161	J546	195	O67
	94	G40	128	H978	162	J598	196	O75
15	95	G46	129	H999	163	J635	197	O99
	96	G53	130	H1004	164	J638	198	O135
	97	G55	131	H1010	165	J708	199	O139
	98	G58	132	H1045	166	J731	200	O268
	99	G68	133	H1052	167	M4	201	O276
20	100	G85	134	H1075	168	M6	202	O289
	101	G86	135	H1096	169	M43	203	O338
	102	G99	136	H1116	170	M60	204	O349
	103	G103	137	H1165	171	M68	205	O351
	104	G107	138	H1301	172	M71	206	O372
25	105	G108	139	H1408	173	M88	207	O386
	106	G112	140	H1413	174	M97	208	O417
	107	G114	141	H1456	175	M100	209	O418
	108	H45	142	I5	176	M114	210	O463
	109	H162	143	I28	177	M120	211	S10
30	110	H165	144	I32	178	M121	212	S34
	111	H171	145	J5	179	M125	213	S70
	112	H174	146	J54	180	M126	214	S169
	113	H225	147	J66	181	M128	215	S185
	114	H236	148	J135	182	M137	216	S195

	217		251	AJ6	285	AM72	319	AP137
	218	AA35	252	AJ8	286	AM93	320	AP76
	219	AB10	253	AJ52	287	AK679	321	AP87
	220	AA240	254	AJ53	288	AK684	322	AP90
5	221	AA244	255	AJ54	289	AK699	323	AP150
	222	AA246	256	AJ78	290	AM155	324	AP159
	223	AA287	257	AJ80	291	AM167	325	AP160
	224	AA299	258	AK368	292	AM207	326	AP162
	225	AA318	259	AJ127	293	AM217	327	AP168
10	226	AB45	260	AJ142	294	AM224	328	AP179
	227	AA36	261	AJ143	295	AM226	329	AP197
	228	AA363	262	AC339	296	AM235	330	AP215
	229	AA365	263	AC370	297	AM259	331	AP224
	230	AA351	264	AL14	298	AM266	332	AP226
15	231	AB290	265	AK401	299	AM267	333	AP242
	232	AC41	266	AK438	300	AM277	334	AP250
	233	AC18	267	AK583	301	AM279	335	AQ11
	234	AC175	268	AK585	302	AC387	336	AQ2
	235	AC114	269	AK598	303	AC395	337	AQ21
20	236	AC111	270	AK604	304	AC410	338	AQ23
	237	AC100	271	AK609	305	AC412	339	AQ3
	238	AC222	272	AK620	306	AC423	340	AQ34
	239	AC325	273	AM10	307	AJ146	341	AQ5
	240	AI44	274	AM104	308	AJ147	342	AR15
25	241	AI6	275	AM123	309	AJ156	343	AR22
	242	AI86	276	AM137	310	AJ168	344	AR28
	243	AJ1	277	AM15	311	AJ169	345	AR3
	244	AJ10	278	AM16	312	AJ172	346	AR34
	245	AJ13	279	AM30	313	AJ173	347	AR42
30	246	AJ15	280	AM38	314	AJ174	348	AR54
	247	AJ20	281	AM39	315	AK528	349	AR61
	248	AJ21	282	AM42	316	AP116	350	AM282
	249	AJ26	283	AM46	317	AP120	351	AM307
	250	AJ27	284	AM66	318	AP135	352	AM349

	353	AM372	387	AR310	421	AM616	455	AM921
	354	AM392	388	AR323	422	AM622	456	AM931
	355	AM400	389	AR324	423	AM625	457	AM973
	356	AM430	390	AR325	424	AM666	458	AM996
5	357	AP11	391	AR349	425	AM686	459	AS56
	358	AP2	392	AR360	426	AM704	460	AS61
	359	AP56	393	AR364	427	AM726	461	AS63
	360	AP57	394	AR400	428	AM728	462	AS65
	361	AP58	395	AR415	429	AM735	463	AS83
10	362	AP60	396	AR417	430	AM741	464	AS85
	363	AP67	397	AM558	431	AM742	465	AS86
	364	AP7	398	AM566	432	AM754	466	AS88
	365	AQ53	399	AM600	433	AM781	467	AT107
	366	AQ54	400	AR420	434	AM795	468	AT111
15	367	AQ61	401	AR437	435	AM814	469	AT138
	368	AQ64	402	AR440	436	AM833	470	AT140
	369	AQ71	403	AR446	437	AM838	471	AT142
	370	AQ73	404	AR450	438	AT16	472	AT146
	371	AQ83	405	AR452	439	AT19	473	AT151
20	372	AM1075	406	AR455	440	AT20	474	AT157
	373	AM1076	407	AR463	441	AT4	475	AT181
	374	AM1083	408	AR464	442	AT53	476	AT97
	375	AR100	409	AR467	443	AT63	477	AS239
	376	AR69	410	AR474	444	AT64	478	AT226
25	377	AM1017	411	AR475	445	AT74	479	AT259
	378	AM1032	412	AS15	446	AT94	480	AT260
	379	AM1036	413	AS20	447	AT95	481	AT265
	380	AM1045	414	AS23	448	AM1000	482	AT280
	381	AM1060	415	AS31	449	AM856	483	AT340
30	382	AM1067	416	AS47	450	AM885	484	AT351
	383	AR253	417	AS48	451	AM889	485	AT352
	384	AK642	418	AS7	452	AM892	486	AT356
	385	AK647	419	AM610	453	AM910	487	AT359
	386	AK650	420	AM614	454	AM918	488	AT361

	489	AS252	523	AU161	557	AW106	591	BE28
	490	AS263	524	AU164	558	AW107	592	BE3
	491	AS264	525	AZ285	559	AW109	593	BE34
	492	AS268	526	AZ286	560	AW133	594	BE9
5	493	AS271	527	AZ287	561	AW140	595	AZ12
	494	AS294	528	AZ290	562	AW92	596	AZ22
	495	AS301	529	AZ188	563	AW95	597	AZ32
	496	AS330	530	AZ191	564	AW98	598	AZ45
	497	AS144	531	AZ204	565	BA185	599	AZ46
10	498	AS152	532	AZ219	566	BA204	600	BF143
	499	AS157	533	AW170	567	BA210	601	BF146
	500	AS162	534	AW176	568	BA226	602	BF157
	501	AS164	535	AW178	569	BG1	603	BF160
	502	AS167	536	AW179	570	BG13	604	BF169
15	503	AS180	537	AW182	571	BG3	605	BF171
	504	AS186	538	AW185	572	BG33	606	BF176
	505	AS187	539	AW189	573	BG36	607	BF178
	506	AU36	540	AW192	574	BG37	608	AS196
	507	AU39	541	AW194	575	BG40	609	AS202
20	508	AU43	542	AW199	576	BG43	610	AS209
	509	AU47	543	AW222	577	BG48	611	AS216
	510	AU50	544	AW231	578	BG58	612	AS230
	511	AU59	545	AZ261	579	BG72	613	AS232
	512	AU71	546	AZ264	580	BG73	614	AX101
25	513	AU101	547	AZ302	581	BF101	615	AX104
	514	AU102	548	AZ303	582	BF132	616	AX107
	515	AU105	549	AK649	583	AZ69	617	AX109
	516	AU106	550	AK663	584	BD51	618	AX122
	517	AU107	551	AR336	585	BD53	619	AX124
30	518	AU115	552	AR356	586	BD65	620	AX127
	519	AU118	553	AR398	587	BD66	621	AX128
	520	AU122	554	AR399	588	BD73	622	AX130
	521	AU138	555	AM1016	589	BD77	623	AX132
	522	AU139	556	AW105	590	BD80	624	AX136



	625	AX137	659	BG274	693	AW35	727	BG504
	626	AX143	660	BG276	694	AW36	728	BG510
	627	AX146	661	AX12	695	AW47	729	BG511
	628	AX51	662	AX17	696	AW49	730	BG513
5	629	AX55	663	AX256	697	AW52	731	BG516
	630	AX56	664	AX30	698	AW60	732	BG518
	631	AX60	665	AX32	699	AW66	733	BG526
	632	AX65	666	AX34	700	AW76	734	BG528
	633	AX78	667	AX49	701	AY241	735	BG552
10	634	AX80	668	AX6	702	AY259	736	BG553
	635	AX81	669	AX8	703	AY268	737	BG556
	636	AX92	670	AZ180	704	BA123	738	AX309
	637	AX97	671	BG191	705	BA134	739	AX315
	638	AX98	672	BG193	706	BA170	740	AX318
15	639	AX99	673	BG199	707	BA176	741	AY186
	640	AZ109	674	BG201	708	BA178	742	AY190
	641	AZ114	675	BG219	709	BA179	743	AY200
	642	BF286	676	BG220	710	BA216	744	AY208
	643	BF290	677	BG221	711	BA233	745	AY211
20	644	BF314	678	BG225	712	BD372	746	AY283
	645	BG236	679	BG228	713	BD375	747	AY289
	646	BG237	680	BG442	714	BD379	748	AY304
	647	BG240	681	BG449	715	BD380	749	AY307
	648	BG241	682	BG457	716	BD403	750	AY318
25	649	BG248	683	BG458	717	BD407	751	AY333
	650	BG249	684	BG461	718	BD409	752	AY334
	651	BG250	685	BG465	719	BD413	753	AY342
	652	BG251	686	BG467	720	BD414	754	AY358
	653	BG255	687	BG471	721	BG481	755	AY362
30	654	BG260	688	BG59	722	BG482	756	BF190
	655	BG267	689	AW12	723	BG492	757	BF191
	656	BG271	690	AW22	724	BG494	758	BF193
	657	BG272	691	AW24	725	BG495	759	BF197
	658	BG273	692	AW32	726	BG503	760	BF208

	761	BQ211	795	BG373	829	BD174	863	BI17
	762	BF216	796	BG374	830	BD176	864	BI2
	763	BF221	797	BG379	831	BD177	865	BI24
	764	BF227	798	BG386	832	BD178	866	BI25
5	765	BF228	799	BG388	833	BD183	867	BI3
	766	BF245	800	BG389	834	BE50	868	BI36
	767	BF250	801	BG391	835	BE64	869	BI37
	768	BF258	802	BG393	836	BE89	870	BI39
	769	BF259	803	BG396	837	BG490	871	BI40
10	770	BF263	804	BG409	838	BG491	872	BI41
	771	BF270	805	BG411	839	BG501	873	BI46
	772	BF273	806	BG414	840	BG502	874	BM1
	773	BG280	807	BG420	841	BG512	875	BM17
	774	BG283	808	HW105	842	BG532	876	BM4
15	775	BG284	809	BB54	843	BK162	877	BM41
	776	BG288	810	BD101	844	BK165	878	BM46
	777	BG296	811	BD104	845	BK167	879	BM69
	778	BG305	812	BD107	846	BK171	880	BM88
	779	BG306	813	BD109	847	BK179	881	BM90
20	780	BG309	814	BD119	848	BK180	882	BA106
	781	BG324	815	BD121	849	BK183	883	BA12
	782	BG327	816	BD127	850	BK186	884	BA32
	783	BG329	817	BD128	851	BK194	885	BA38
	784	BG332	818	BD132	852	BK200	886	BA40
25	785	BG334	819	BD136	853	BK206	887	BA71
	786	BG335	820	BD137	854	BK216	888	BA79
	787	BG350	821	BD140	855	BK231	889	BA8
	788	BG356	822	BD144	856	BK232	890	BA88
	789	BG357	823	BD151	857	BK236	891	BA90
30	790	BG363	824	BD154	858	BK237	892	BA91
	791	BG365	825	BD164	859	BK241	893	BA98
	792	BG366	826	BD165	860	BK243	894	BK15
	793	BG368	827	BD169	861	BK246	895	BK17
	794	BG372	828	BD170	862	BK253	896	BK24

	897	BK25	931	AY428	965	BF	999	BG139
	898	BK26	932	AY437	966	BK155	1000	BG140
	899	BK260	933	AY440	967	BK158	1001	BG141
	900	BK265	934	AY442	968	BK75	1002	BG142
5	901	BK270	935	AY449	969	BK78	1003	BG145
	902	BK271	936	AY457	970	BK92	1004	BG148
	903	BK280	937	AY470	971	BK93	1005	BG151
	904	BK284	938	AY487	972	BK95	1006	BG156
	905	BK286	939	AY489	973	BK96	1007	BG158
10	906	BK29	940	AY511	974	BM101	1008	BG160
	907	BK291	941	BE153	975	BM117	1009	BG168
	908	BK295	942	BF327	976	BM124	1010	BG170
	909	BK296	943	BI64	977	BM139	1011	BG171
	910	BK299	944	BI66	978	BM154	1012	BG172
15	911	BK304	945	BI75	979	BM155	1013	BG173
	912	BK307	946	BI80	980	BM158	1014	BG93
	913	BK308	947	BI81	981	BM94	1015	BG95
	914	BK339	948	BI82	982	AY102	1016	BI102
	915	BK34	949	BI86	983	AY107	1017	BI103
20	916	BK343	950	BI87	984	AY122	1018	BI107
	917	BK40	951	BI88	985	AY131	1019	BI110
	918	BK41	952	BI91	986	AY137	1020	BI114
	919	BK48	953	BI92	987	AY140	1021	BI117
	920	BK49	954	BK102	988	AY147	1022	BI120
25	921	BK57	955	BK105	989	AY157	1023	BI122
	922	BK59	956	BK107	990	AY160	1024	BI124
	923	BK61	957	BK112	991	AY183	1025	BI126
	924	BK68	958	BK114	992	AY93	1026	BI127
	925	BL341	959	BK115	993	BG102	1027	BI129
30	926	AY398	960	BK117	994	BG104	1028	BI133
	927	AY406	961	BK120	995	BG112	1029	BI139
	928	AY407	962	BK130	996	BG125	1030	BI150
	929	AY408	963	BK134	997	BG132	1031	BI164
	930	AY421	964	BK142	998	BG137	1032	BI97

	1033	BO8	1067	BQ58	1101	BO71	1135	BL209
	1034	BI99	1068	BD189	1102	BO87	1136	BL210
	1035	BS1	1069	BD194	1103	BO9	1137	BL211
	1036	BS54	1070	BD199	1104	BD235	1138	BL219
5	1037	BS58	1071	BD200	1105	BD240	1139	BL220
	1038	BS81	1072	BD201	1106	BD241	1140	BL229
	1039	BS89	1073	BD208	1107	BD244	1141	BL230
	1040	BH100	1074	BD209	1108	BD247	1142	BL243
	1041	BH106	1075	BD213	1109	BD251	1143	BL247
10	1042	BH111	1076	BD214	1110	BD257	1144	BL249
	1043	BH123	1077	BD222	1111	BD260	1145	BL255
	1044	BH131	1078	BH19	1112	BD262	1146	BL257
	1045	BH157	1079	BH195	1113	BD265	1147	BL271
	1046	BH297	1080	BH2	1114	BD268	1148	BL274
15	1047	BH306	1081	BH227	1115	BD522	1149	BL30
	1048	BH309	1082	BH272	1116	BD538	1150	BL67
	1049	BH316	1083	BH276	1117	BD544	1151	BL73
	1050	BH323	1084	BH281	1118	BD548	1152	BL89
	1051	BH339	1085	BH41	1119	BD561	1153	BD420
20	1052	BH365	1086	BH51	1120	BL147	1154	BD423
	1053	BH389	1087	BH66	1121	BL15	1155	BD426
	1054	BH392	1088	BH7	1122	BL152	1156	BD427
	1055	BJ54	1089	BH87	1123	BL156	1157	BD428
	1056	BJ62	1090	BH90	1124	BL160	1158	BD438
25	1057	BJ66	1091	BJ20	1125	BL178	1159	BD441
	1058	BJ67	1092	BJ27	1126	BL179	1160	BD445
	1059	BJ69	1093	BJ29	1127	BL183	1161	BD473
	1060	BJ70	1094	BJ38	1128	BL185	1162	BD486
	1061	BJ75	1095	BJ39	1129	BL186	1163	BD489
30	1062	BJ76	1096	BJ9	1130	BL187	1164	BD492
	1063	BJ78	1097	BO11	1131	BL194	1165	BD512
	1064	BJ87	1098	BO20	1132	BL196	1166	BL106
	1065	BQ20	1099	BO4	1133	BL201	1167	BL310
	1066	BQ3	1100	BO52	1134	BL205	1168	BN1

	1169	BN107	1203	BD351	1237	BN357	1271	BP22
	1170	BN12	1204	BN189	1238	BN354	1272	BP24
	1171	BN130	1205	BN201	1239	BN365	1273	BP25
	1172	BN132	1206	BN212	1240	BN422	1274	BT99
5	1173	BN133	1207	BN280	1241	BN425	1275	BP28
	1174	BN139	1208	BN284	1242	BN439	1276	BP3
	1175	BN141	1209	BN329	1243	BN460	1277	BP4
	1176	BN153	1210	BN331	1244	BN461	1278	BP43
	1177	BN156	1211	BN591	1245	BN463	1279	BP47
10	1178	BN171	1212	BO153	1246	BN472	1280	BP504
	1179	BN174	1213	BO157	1247	BN473	1281	BP506
	1180	BN180	1214	BO159	1248	BO100	1282	BP508
	1181	BN246	1215	BO166	1249	BO107	1283	BP521
	1182	BN267	1216	BO178	1250	BO114	1284	BP528
15	1183	BN268	1217	BO189	1251	BO121	1285	BP530
	1184	BN33	1218	BO194	1252	BO126	1286	BP532
	1185	BN40	1219	BO210	1253	BO133	1287	BP537
	1186	BN48	1220	BO212	1254	BO137	1288	BP544
	1187	BN5	1221	BO213	1255	BO398	1289	BP545
20	1188	BN563	1222	BO218	1256	BO399	1290	BP55
	1189	BN65	1223	BO226	1257	BO401	1291	BP567
	1190	BN69	1224	BO279	1258	BO432	1292	BP569
	1191	BN81	1225	BO301	1259	BO528	1293	BP57
	1192	BN97	1226	BO323	1260	BO535	1294	BP590
25	1193	BN99	1227	BO358	1261	BO538	1295	BP61
	1194	BD286	1228	BO365	1262	BO549	1296	BP70
	1195	BD288	1229	BO385	1263	BO551	1297	BP71
	1196	BD297	1230	BO250	1264	BO93	1298	BP780
	1197	BD316	1231	BO254	1265	BP101	1299	BP783
30	1198	BD317	1232	BO256	1266	BP118	1300	BP784
	1199	BD321	1233	BO260	1267	BP121	1301	BP791
	1200	BD327	1234	BO261	1268	BP15	1302	BP797
	1201	BD335	1235	BO273	1269	BP19	1303	BP806
	1202	BD339	1236	BN342	1270	BP21	1304	BP809

	1305	0	1339	BV243	1373	CC71	1407	BR572
	1306	BP813	1340	BV248	1374	CC76	1408	BR559
	1307	BP814	1341	BV250	1375	CC78	1409	BR538
	1308	BP815	1342	BV259	1376	CC81	1410	BR537
5	1309	BP820	1343	BV273	1377	CC89	1411	BR533
	1310	BP84	1344	BV275	1378	CD124	1412	BR500
	1311	BP919	1345	BV49	1379	CD128	1413	BR48
	1312	BP925	1346	BV51	1380	CD140	1414	BR475
	1313	BQ115	1347	BV66	1381	CD145	1415	BR436
10	1314	BQ129	1348	BV70	1382	CD146	1416	BR434
	1315	BS116	1349	BV71	1383	CD173	1417	BR4
	1316	BT101	1350	BV72	1384	CD194	1418	BR346
	1317	BT133	1351	BV73	1385	CD31	1419	BR342
	1318	BT139	1352	BV88	1386	CD50	1420	BR338
15	1319	BT33	1353	BW345	1387	CF50	1421	BR333
	1320	BT4	1354	CB25	1388	CF62	1422	BR332
	1321	BW13	1355	CB3	1389	CF78	1423	BR212
	1322	BW18	1356	CB30	1390	CF85	1424	BR195
	1323	BW2	1357	CB37	1391	CF89	1425	BR194
20	1324	BW51	1358	CC144	1392	BR814	1426	BR19
	1325	BW61	1359	CC145	1393	BR782	1427	BR141
	1326	BW83	1360	CC149	1394	BR778	1428	BR122
	1327	BV185	1361	CC153	1395	BR77	1429	BR107
	1328	BV195	1362	CC162	1396	BR767	1430	BR1010
25	1329	BV200	1363	CC25	1397	BR758	1431	BR101
	1330	BV202	1364	CC31	1398	BR733	1432	BR1008
	1331	BV204	1365	CC322	1399	BR719	1433	BQ135
	1332	BV206	1366	CC39	1400	BR711	1434	BP913
	1333	BV210	1367	CC397	1401	BR71	1435	BP911
30	1334	BV212	1368	CC403	1402	BR63	1436	BP897
	1335	BV227	1369	CC46	1403	BR616	1437	BP895
	1336	BV238	1370	CC50	1404	BR610	1438	BP894
	1337	BV239	1371	CC59	1405	BR607	1439	BP893
	1338	BV241	1372	CC69	1406	BR595	1440	BP884

	1441	BP882	1475	BU65
	1442	BP875	1476	BU68
	1443	BP870	1477	BU76
	1444	BP859	1478	BV106
5	1445	BP837	1479	BV112
	1446	BP833	1480	BV123
	1447	BP499	1481	BV124
	1448	BP492	1482	BV126
	1449	BP488	1483	BV128
10	1450	BP484	1484	BV131
	1451	BP483	1485	BV133
	1452	BP481	1486	BV134
	1453	BP475	1487	BV135
	1454	BN418	1488	BV138
15	1455	BN415	1489	BV139
	1456	BN405	1490	BV140
	1457	BN394	1491	BV141
	1458	BN390	1492	BV145
	1459	BN387	1493	BV15
20	1460	BN379	1494	BV158
	1461	BN377	1495	BV160
	1462	BR84	1496	BV172
	1463	BR853	1497	BV180
	1464	BR854	1498	BV21
25	1465	BR884	1499	BV27
	1466	BT160	1500	BV29
	1467	BU165		
	1468	BU29		
	1469	BU44		
30	1470	BU45		
	1471	BU53		
	1472	BU57		
	1473	BU6		
	1474	BU60		

The "C D No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selectin "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.



The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions, most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) <sup>2</sup>	Hybridization Temperature and Buffer <sup>1</sup>	Wash Temperature and Buffer <sup>1</sup>
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T <sub>B</sub> *; 1xSSC	T <sub>B</sub> *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T <sub>D</sub> *; 1xSSC	T <sub>D</sub> *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T <sub>F</sub> *; 1xSSC	T <sub>F</sub> *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T <sub>H</sub> *; 4xSSC	T <sub>H</sub> *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T <sub>J</sub> *; 4xSSC	T <sub>J</sub> *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T <sub>L</sub> *; 2xSSC	T <sub>L</sub> *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T <sub>N</sub> *; 6xSSC	T <sub>N</sub> *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T <sub>P</sub> *; 6xSSC	T <sub>P</sub> *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T <sub>R</sub> *; 4xSSC	T <sub>R</sub> *; 4xSSC

. The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

\*: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH<sub>2</sub>PO<sub>4</sub>, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

\*T<sub>B</sub> - T<sub>R</sub>: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T<sub>m</sub>) of the hybrid, where T<sub>m</sub> is determined according to the following equations. For hybrids less than 18 base pairs in length, T<sub>m</sub>(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T<sub>m</sub>(°C) = 81.5 + 16.6(log [Na<sup>+</sup>]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na<sup>+</sup>] is the concentration of sodium ions in the hybridization buffer ([Na<sup>+</sup>] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. ~~The isolated~~

polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl or Cibacrom blue 3GA

Sepharose ; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography:

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

## USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention  
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

### Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or  
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding  
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related  
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-  
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

#### Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

#### Cytokine and Cell Proliferation/Differentiation Activity



A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon  $\gamma$ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -

5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:

10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.

15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

#### Immune Stimulating or Suppressing Activity

A protein of the present invention may also exhibit immune stimulating or immune

20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may

25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,

30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other  
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune  
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from  
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing  
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys  
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the  
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient  
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding  
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably  
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor  
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection  
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or  
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I  $\alpha$  chain protein and  $\beta_2$  microglobulin protein or an MHC class II  $\alpha$  chain protein and an MHC class II  $\beta$  chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Bowman et al., J. Virology 61:1992-1998; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., Cellular Immunology 133:327-341, 1991; Brown et al., J. Immunol. 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, J. Immunol. 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

#### Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet  
5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post  
10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,  
20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*  
25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;  
30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,



H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

#### Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

A protein of the present invention, which induces cartilage and/or bone growth in  
10 circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma  
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of  
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the  
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein  
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured  
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium ).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,  
20 alone or in heterodimers with a member of the inhibin  $\alpha$  family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- $\beta$  group, may  
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., N 321:776-779, 1986; Mason et al., Nature 321:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

#### Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide  
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can  
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one  
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al.  
30 J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

#### Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic and thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

#### Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-150, 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

#### Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or  
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,  
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

#### Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor  
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

#### Other Activities

30 A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the

5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent

10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for

15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

## ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that



can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5           The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides,  
10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15           As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,  
20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a  
25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either  
30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers, antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01  $\mu$ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1  $\mu$ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogenic, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also  
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and  
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices  
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such  
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- $\alpha$  and TGF- $\beta$ ), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

FIG. 1 and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney



DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Jacobs, Kenneth  
McCoy, John  
LaVallie, Edward  
Racie, Lisa  
Merberg, David  
Treacy, Maurice  
Spaulding, Vikki  
Agostino, Michael
- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1500
- (iv) CORRESPONDENCE ADDRESS
  - (A) ADDRESSE: Genetics Institute, Inc.
  - (B) STREET: 87 CambridgePark Drive
  - (C) CITY: Cambridge
  - (D) STATE: Massachusetts
  - (E) COUNTRY: U.S.A
  - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy Disk
  - (B) COMPUTER: IBM PC Compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
  - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Brown, Scott A.
  - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: (617) 498-8224
  - (B) TELEFAX: (617) 876-5851

## (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 335 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```

GTCGACCCCA TCCCATCCAA TAGTCCCAT CTCTCTCAG CTCTCTCTGT AGTTTCTCTT      60
CCTCCGCCTG CCTTTTAAGT TAGTGTTTCC CAGGACAGAG GTGACTCAGT TGTATCCAGA      120
CCGCTCTGTG ACTGAACACC CACTTTCTTT TCCTTTTCCA ATAAATATAT GTAACATACA      180
TGTCAACTAG GAACAAAACA GTATCTCAGG AATCCACCAT CCAATTAAAA ATGGACCCTT      240

```

ACCCTTACCG CCTGCA GAGACCCCAA TACAGCGCAT TTCCCTT CTTTGTCTT 300  
TCTCAAGTTT TACCACGGCC TCTTTGGCCC TCGAG 335

## (2) INFORMATION FOR SEQ ID NO:2:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTGGGCC AAAGAGGCCG TTGACCATTG ATAGAACACA GGCATACACA GGAAGATACA 60  
TTCACAGAAG AGCTTCCTGC ACAAAGTAAG CCACCAGCGC AACATGACAG TGAAGACCCT 120  
GCATGGCCCA GCCATGGTCA AGTACTTGCT GCTGTCGATA TTGGGGCTTG CTTTCTGAG 180  
TGAGCGGGCA GCTCGGAAAA TCCCCAAGT AGGACATACT TTTTCCAAA AGCCTGAGAG 240  
TTGCCCGCCT GTGCCAGGAG GTAGTATGAA GCTTGACATT GGCATCATCA ATGAAAACCA 300  
GCGCGTTTCC ATGTCACGTA ACATCGAGAG CCGCTCCACC TCCCCCTGGA ATTACACTGT 360  
CACTTGGGAC CCCAACCGGT ACCCCTCGGA AGTTGTACAG GCCCAGTGTA GGAAGTGGG 420  
CTGCATCAAT GCTCAAGGAA AGGAAGACAT CTCATGAAT TCCGTTCCCA TCCAGCAAGA 480  
GACCTGTCTG ACGGCCTCTT TGGCCCTCGA GACA 514

## (2) INFORMATION FOR SEQ ID NO:3:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GTCGACCCTC CACCTGCAAA TCCACTGTCC ATACCCTTGG ATTGGTTGAA GAGCCTTTGG 60  
TCATACTGAA CTTCAATTGGA AGTCCGAGGA TTAGGAACAC CGAGAGCAAT AACTTCACTG 120  
ATATCCCGAT TTTCAATTCT CTGAAGTTTC GACCTCTTAT CAGGAGCTGC CTTGGAAAGA 180  
TTCCGGTCAT GCTGTCTCTC TTTTCGCTG TCATGCCGGA TTTCATCCCT CTCACGTGCC 240  
TCCCCATCCT CTTTTCAC ATGAGTTTTC ATCCCAGTTC TTCTCTCCCT GGCTTCTCTG 300  
GCCATTTCTC TAAGTTTCTC TNCANGTNTN NCCTTTTCTT TCTGAGCCAT TTTTCTCTCT 360  
ACTTGGGCGT CGACGGCCTC TGGGGCCCTC GAG 393

## (2) INFORMATION FOR SEQ ID NO:4:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GTCGACCAGG CATAACAGG AAGATACATT CACAGAAAGA GCTTCCTGCA CAAAGTAAGC 60  
CACCAGCGCA ACATGACAGT GAAGACCCTG CATGGCCAG CCATGGTCAA GTACTTGCTG 120

CTGTCTGA	GGGGCTTGC	CTTTCTGAGT	GAGGCGGCAG	CTGGGAAAAT	CCCCAAAGTA	180
GGACATACTT	TTTTCACAAA	GCCTGAGAGT	TGCCCGCCTG	TGCCAGGAGG	TAGTATGAAG	240
CTTGACATTG	GCATCATCAA	TGAAAACCAG	CGCGTTTCCA	TGTCACGTAA	CATCGAGAGC	300
CGCTCCACCT	CCCCCTGGAA	TTACACTGTC	ACTTGGGACC	CCAACCGGTA	CCCCTCGGAA	360
GTTGTACAGG	CCCAGTGTAG	GAACCTGGGC	TGCATCAATG	CTCAAGGAAA	GGAAGACATC	420
TCCATGAATT	CCGTTCCCAT	CCAGCAAGAG	ACCCTGGTCG	TCCGGAGGAA	GCACCAAGGC	480
TGCTCTGTTT	CTTTCAGTT	GGAGAAGGTG	CTGGTGA CTG	TGGCTGCAC	CTGCGTCACG	540
TCAACGGCCT	CTTTGGCCCT	CGAG				564

## (2) INFORMATION FOR SEQ ID NO:5:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GTGACCTTC	AGTTGCCTCA	GACCCAGTA	ATACAACGGT	CACCACCATG	AAACCTACAG	60
CGGCATCTAA	TACAACAACA	CCAGGGATGG	TCTCAACAAA	TATGACTTCT	ACCACCTTAA	120
AGTCTACACC	CAAAACAACA	AGTGTTCAC	AGAACACATC	TCAGATATCA	ACATCCACAA	180
TGACCGTAAC	CCACAATAGT	TCAGTGACAT	CTGCTGCTTC	ATCAGTAACA	ATCACAACAA	240
CTATGCATTG	TGAAGCAAAG	AAAGGATCAA	AATTTGATAC	TGGGAGCTTT	GTTGGTGGTA	300
TTGTATTAAC	GCTGGGAGTT	TTATCTATTC	TGTCACGGC	CTCTTTGGCC	CTCGAG	356

## (2) INFORMATION FOR SEQ ID NO:6:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GTA CTGCTGC	ACGGACTCTG	GAACCATGAA	CATATTTGAT	CGAAAGATCA	ACTTTGATGC	60
GCTTTTAAAA	TTTTCTCATA	TAACCCCGTC	AACGCAGCAG	CACCTGAAGA	AGGTCTATGC	120
AAGTTTGGCC	CTTTGTATGT	TTGCGGCGGC	TGCAGGGGCC	TATGTCCATA	TGGTCACTCA	180
TTTCATTGAG	GCTGGCCTGC	TGTCTGCCTT	GGGCTCCCTG	ATATTGATGA	TTTGGCTGAT	240
GGCAACACCT	CATAGCCATG	AAACTGAACA	GAAAAGACTG	GGACTTCTTG	CTGGATTGTC	300
ATTCTTTACA	GGAGTTGGCC	TGGGCCCTGC	CCTGGAGTTT	TGTATTGCTG	TCAACCCGAG	360
CATCCTTCCC	ACTGCTTTCA	TGGGCACGGC	AATGATCTTT	ACCTGCTTCA	CCCTCAGTGC	420
ACTCTATGCC	AGGCGCCGCG	GCTACCTCTT	TCTGGGAGGT	ATCTTGATGT	CAGCCCTGAG	480
CTTGTGCTT	TTGTCGACGG	CCTCTTTGGC	CCTCGAGACA			520

## (2) INFORMATION FOR SEQ ID NO:7:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```

GTCGACGTAC CACCAGCAAC CATCAATCCC GTCTCCTCCT GCCTCCTCTC CTGCAATCCA      60
CCCCGCCACG ACTATCGCCA TGGCAGCCCT GATCGCAGAG AACTTCCGCT TCCTGTCACT      120
TTTCTTCAAG AGCAAGGATG TGATGATTTT CAACGGCCTG GTGGCACTGG GCACGGTGGG      180
CAGCCAGGAG CTGTCCTCTG TGGTGGCCTT CCACTGCCCC TGCTCGCCGG CCCGGAACATA      240
CCTGTACGGG CTGGCGGCCA TCGGCGTGCC CGCCCTGGTG CTCTTCATCA TTGGCATCAT      300
CCTCAACAAC CACACCTGGA ACCTCGTGGG CGAGTGCCAG CACCGGAGGA CCAAGAACTG      360
CTCCGCCGCC CCCACCTTCC TCCTTCTAAG CTCCATCCTG GGACGTGGCG CTGTGGCCCC      420
TGTCACCTGG TCTGTCTCTT CCCTGCTGCG TGGTGAGGCT TATGTCTGTG CTCTCAGTGA      480
GTTCTGTGGAC CCTTCCTCAC TCACGGCCTC TTTGGCCCTC GAGACA                      526

```

## (2) INFORMATION FOR SEQ ID NO:8:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GTCAMCTGTG CAGCGGAGTT TGACTTTATG GAAAAAGAGA CTCCACTGAG ATACACAAAG      60
ACATTATTGC TTCCAGTTGT TCTTGTAGTG TTTGTTGCTA TTGTTAGAAA GATTATTAGT      120
GATATGTGGG GTGTCTTAGC TAAACAACAG ACACATGTAA GAAAACACCA GTTTGATCAT      180
GGAGAGCTGG TTTACCATGC ATTGCAATTG TTAGCATATA CAGCCCTTGG TATTTTAATT      240
ATGAGACTAA AACTCTTCTT GACACCATAC ATGTGTGTTA TGGCATCACT GATCTGCTCA      300
AGACAGCTAT TTGGATGGCT CTTTGGCAAA GTACATCCTG GTGCTATTGT GTTTGTTATA      360
TTAGCAGCAA TGTCAATACA AGGTTGAGCA AATCTGCAAA CCCAGTGGAA GTCGACGGCC      420
TCTTTGGCCC TCGAGACA                      438

```

## (2) INFORMATION FOR SEQ ID NO:9:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GTCGACCCTA CACCATGTTT TTCTCCACGT TCTACCACGC CTGCGACCAG CCCGGGGAGG      60
CGGTGCTGTG CATCCTCAGC TACGACACGC TGCAGTACTG CGACTTCTTG GGCTCCGGGG      120
CGGCCATCTG GGTCAACATC CTGTGCATGG CACGGCTCAA GACAGCCCTG AAATACGTGC      180
TGTTTCTTCT GGGTACACTG GTCATCGCCA TGTCCTTGCA GCTGGACCGC AGGGGCATGT      240
GGAACATGCT GGGGCCCTGC CTCTTGGCCT TCGTGATCAT GGCCTCCATG TGGGCTTACC      300
GCTGCGGGCA CCGGCGCCAG TGCTACCCCA CCTCGTGGCA GCGCTGGGCC TTCTACCTCC      360
TGCCCGGCGT CTCTACGGCC TCTTGGCCCC TCGAG                      395

```

## (2) INFORMATION FOR SEQ ID NO:10:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

GTCGACAGAM WNCACCCCTC AGACGCCACA TCCCCTKACA AGCTGMCAGG CAGGTTCTCT	60
TCCTCTCACA TACTGACCCA CGGKTCCACC CTCTCTCCCC TGGAAAGGAC ACCATGAGCA	120
CTGAAAGCAT GATCCGGRAC GTGGAGCTGK CCGAGGAGGN GYTCCCAAG AAGACAGGGG	180
GGRCCCAGGG CTCCAGGCGG GGGTTTGTTC CTCAGWCTCT TCTCCTTCCT GATCGNGGGA	240
GGGGGCACCA CGCTCTTCTG TCTGCTGGAC TTTGGAGTGA TCGGNCCCCA GAGGGAAGGA	300
GTCCCCCAGG GGAACCTCTC T	321

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GTCGACGGCC GAGAWGGACA TGAAGCAATA TCAAGGCTCC GCGGCGTCG CCATGGATGT	60
GGNACGGAGT CGCTTCCCCT ACTGCGTGGT GTGGACGCCC ATCCCGGTGN TCACGTGGTT	120
TTTCCCCTATC ATCGGCCACA TGGGCATCTG CACATCCACA GGAGTCATTG GGGACTTCGC	180
GGGCCCCCTAC TTTGTCTCAG AGGACAACAT GGCCTTTGGA AAGCCTGCCA AGTACTGGAA	240
GTGGGACCTT GCTCAGGTCT ATGCTAGCGG GCCCAACGCA TGGGACACGG CTGTGCACGA	300
CGCCTCTGAG GAGWACAAGC ACCGCATGCA CAATCTCTGC TGTGACAACT GCCACTCGCA	360
CGTGGCATCG GCCCTGAATC TGATGCGCTA CAACAACAGC ACCAACTGGA ATATGGTGAC	420
GCTCTGCTTC TTCTGCCTGC TCTACGGGAA GTACGTCAGC GTTGGGGCCT TCGTGAAGAC	480
CTGGCTGCCC TTCATCCTTC TCCTGTCGAC GGCCTCTTTG GCCCTCGAGA CA	532

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GTGTACACCA AGATGATGAC CAAGAAGCCG GGCATGTTCT TCAACCCCGA GGAGTCGGAG	60
CTGGACCTGA CCTACGGNAA CAGATACAAN AACGTGAAGC TCCCTGACGN CTACGAGCGC	120
CTCATCCTGG ACGTCTTCTT TGGGAGGCAG ATGNACTTCG TCGCGAGGGA CGANCTCCNT	180
GAGGNCTGGC GTATTTTCA CCCCCTGNT GTACCANATT GAGCTNGAGA AGGCCAAGCC	240
TCCAGGAACA CATGTGGGGT CATTACCAAA CAGGGTCCAT CCACATGATG GTGAACATCA	300
ANCTTTGGGC GGACAANGAT TGCTGGGAAT GGAATCCTG TTTACTGGGG AGCTCTGGGA	360
GTCTTTGAGC TTTGCTGAAA GGTACCCTGC CATCATCTAT AACATCCTGC TCTTTGGGCT	420
GACCACTGCC CTGGGTCAGA GCWTCATCTT TATGACGATT GTGTATCTTG GTCCCCTGAC	480
CTGCTCCATC ATCACTACAA CTCGAAAGTT CTTCAAAAW KTGCCCGCTG TGATCCTCTT	540
CGCCAATCCC ATGTGACGCG CCTCTTTGGC CCTCGAGACA	580

(2) INFORMATION FOR SEQ ID NO:13:



- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 434 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GTCGACACTA CTTATGCGGC TACTTTGTCC AGGGCACAAA ATGCCGTGGC AGTATCTAAC      60
TAAACCCCA CAAACTGCT TAATAACAGT TTKGRATGTG AGAAATTTAG ATAATTTAAA      120
TATAAGGTGC AGGTTTAAAT TTCTGAGTTT CTTCTTTTCT ATTTTATTATA AAAAGAAAAT      180
AATTTTCAGA TTAAATTGAA TTGGAAAAAA CAATACTTCC CACCAGAATT ATATATCCTG      240
AAAATTGTAT TTTTGTATA TAAACAACCT TTAAGAAAGA TCATTATCCT TTTCTCTACC      300
TAAATATGAG GAGTCTTAGC ATAATGACAA ATATTTATAA TTTTCAATT AATGGTACTT      360
GCTGGATCCA CACTAACATC TTTGCTAATA ATCTCATTGT TTCTTCGTCA ACGGCCTCTT      420
TGGCCCTCGA GACA                                     434

```

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 523 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

```

GTGGACGTTT TTTTCTTCTT TTTCTTTTTT TTAAGAAAAA CCCATTTTTT TCCTTAAGGA      60
CTTACTAGCC AAAATTTCTT AAACCTCGAG GACTCTACTA GCCATGGCCG AGCCATTCTT      120
GTCAGAATAT CAACACCAGC CTCAACTAG CAACTGTACA GGTGCTGCTG CTGTCCAGGA      180
AGAGCTGAAC CCTGAGCGCC CCCAGGCGC GGAGGAGCGG GTGCCCCGAGG AGGACAGTAG      240
GTGGCAATCG AGAGCGTTCC CCCAGTTGGG TGGCCGTCCG GGGCCGGAGG GGGAAGGGAG      300
CCTGGAATCC CAACACCTC CCTTGACAGC CCAGGCCTGT CCAGAATCTA GCTGCCTGAG      360
AGAGGGCGAG AAGGGCCAGA ATGGGGACGA CTCGTCCGCT GGCGGCGACT TYCCGCGCC      420
GGCAGAAGTG GAACCGACGC CCGAGGCCGA GCTGCTCGCC CAGCCTTGTC ATGACTCCGA      480
GGCCAGTAAG ATGGGGTCGA CGGCCTCTTT GGCCCTCGAG ACA                               523

```

(2) INFORMATION FOR SEQ ID NO:15:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 142 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

```

GTCGACCTC ANTGTTCTGG AACTGGTCTT GGAAGGGATN GTTATNCTG AGTACACCTG      60
GGAAGTATTT GGGTACTGTC ANGAGCTGGA GTTGNCTNG NATTACCNTC TTCTGCCNA      120
TCTGGTGGTA GGGGTAAACC NG                               142

```

(2) INFORMATION FOR SEQ ID NO:16:

- (i) UENCE CHARACTERISTICS:  
 (A) LENGTH: 534 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```

GTCCACCCGG GCCGCCCTC GCCGCCCGG CTCTCGCGG GCTGCTCTTT GTCTCCCCGA      60
CCTCGATCCC TGCCTCTCCG GCGGCGTGGG GGCTCGTCTG AGGCTTCCCC CATCTCCCCG      120
CTGGAACCTCC TGCCTCCCGG GGGTTAGAGG AGGGTTCGTT CGAGGGCTGG AAGCGGGAAA      180
GCGGGGCGGA AGGACTGGGC TCATCGCCTC CTGATTAAC TGTGTCTTTT ACTTAAAATG      240
ACTTTTCCCC CACTTTGTCA AACTTGAGAA CTGTSTTGTG TGTGTGTGTT TCCTTGAGTC      300
TCTAGCTTCA AAATTAAGAG TAGGCGCTAC CGCTGCGATT GTGGGCAGTT GTGTGGTTGG      360
CGGCTGCGTT TGGAGCTCTG AGTTGAAAAG ATGTACGTGA ATGTATGGTT TAGATTTTGT      420
TCTTTTTTTT GCGATTGTC' GATTGGGAGT ACTTTTCCTT TGCGAAATGG GCGAATTTGG      480
TTTTCTTTT GTTCATTGAG AACTGGGTCG ACGGCCTCTT TGGCCCTCGA GACA          534
  
```

(2) INFORMATION FOR SEQ ID NO:17:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 558 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GTTCMCGAAG GGAAGAAGAA GATGAACAAG AACAAATGCCA AGGCTCTGAG CACCTTGCGT      60
CAGAAGATCC GAAAATACAA CCGTGATTTC GAGTCCCATC TCACAAGCTA CAAGCAGAAC      120
CCCCAGCAGT CTGCGGATGA AGATGCTGAG AAAAGTGAGG AGGATTCAGA AGGCTCTTCA      180
GATGTGGATG AGGATGAGGA CGGAGTCAGT GCTGCAACTT TCTTGAAGAA GAAATCAGAA      240
GCTCCTTCTG GGGAGAGTCG CAAGTTCCTC MAAAAGATGG ATGATGAAGA TGAGGACTCA      300
GAAGATTCCG TAGATGATGA AGACTGGGAC WCAGGTTCCA CATCTTCCGA CTCCGACTCA      360
GAGGAGGAAG AAGGGAAACA AACCGCGCTG GCCTCAAGAT TTCTTAAAAA GGCACCCACC      420
ACAGATGAGG ACAAGAAGGC AGCCGAGAAG AACCGGGAGG ACAAAGCTAA GAAGAAGCAC      480
GACAGGAAAT CCAAGCGCCT GGATGAGGAG GAGGAGGACA ATGAAGGCGG GGTACGGGCC      540
TCTTTGGCCC TCGAGACA          558
  
```

(2) INFORMATION FOR SEQ ID NO:18:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GTTGACGGCC AGCTTGCTGT CTAACTTTTC ACATCGGAGA AGCTCCTTGG CCTGGGAGGA      60
CTTCTCCGTG CCTTCCCCCT TCCCAGAGAT GCCCTGTCTG AGGGAGTGGC AGAGACCATC      120
CTGGAGGGTG CCAGGAGCGG GGGCCCGTCT GAAGTCCCCG CCACCTGGC GGTGCTCCGC      180
AGGCACCGGG CCATCCGACA TCGCACCCCTC GCTGGCGCGC ACGCTGGCCT GCTTGTAAG      240
  
```

```

AGCATCCTTC A GGGCTGC CCAGCGGTGG CGCCTCCTGC ATAGA F TGTTCCTCAA 300
AGTACTTGAC CTTTCCACAG CCTTCGGATA GACTTTCTTC TCTCTCTCTT CCAGCTTAAA 360
CAGAGCAAAG TTTTCCAAAT CACTCCCGGG TCCATGGGAT TTCTGGTGGG ATTCCTGTTT 420
CTCTGGGAAG CCGTCTGGTC GACGGCCTCT TTGGCCCTCG AGACA 465

```

## (2) INFORMATION FOR SEQ ID NO:19:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 694 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

GNNNTCGTTG TTCCAGAACT TGATGAGGGG ATCTCGGAAC AACACNGAAA CTTTCCCTC 60
CCTCANTNAC GCACCNCGAC TCTCTATTGA GCCAACGGNA ANNCGGCCCT TCCCTCCAAG 120
TAACTTTGNA TTGAAAATA AAAAAAAG NTTGCTGTCC TTGCTATCCA AGAATAAATA 180
GACCTNCAAN TATTAATCTT TTGTTCCCT CGTCATTGTT CTCGTTCCCT TTCTNCCTTG 240
TTTCTTTTTC TGCACAATAT ATCAAGCNAT ACCAAGCATA CAATCAAAC CCAAGCTCGG 300
AATTCGGCCA NAGAGACCGT CGACGGAAGA AATTGNCTGG AAATTGTTC ATGGTGATAT 360
ATACCGTCCN CCAAGAAAAG GGATGCTGCT ATCAGTCTTT CTAGGATCCG GGACACAGAT 420
ATTAATTATG ACCTTTGTGA CTCTATTTT CGCTTGCTG GGAGTTTGT CACCTGCCAN 480
CCGAGGAGCG CTGATGACGT GTGCTGTGGT CCTGTGGGTG CTGCTGGGCA CCCCTGCAGG 540
CTATGTTGCT GCCAGATTCT ATAAGTCCTT TGGAGGTGAG AAGTGAAAA CAAATGTTT 600
ATTAACATCA TTTCTTTGTC CTGGGATTGT ATTTGCTGAC TTCTTTATAA TGAATCTGAT 660
CCTCTGGTCA ACGGCCTCTT TGGCCCTCGA GACA 694

```

## (2) INFORMATION FOR SEQ ID NO:20:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 473 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

```

AGACTCGTCT CAGACCAGTT GCAGCCTTCT CAACCCAAAC GCCGACCAAG GAAAACTCA 60
CTACCATGAG AATTGCAGTG ANTTGCTTTT GCCTCCTAGG CATCACCTGT GCATACCAG 120
NTAAACAGGC TGATTCTGGA AGTTCTGAGG AAAAGCAGCT TTACAACAA TACCAGATG 180
CTGTGNCCAC ATGGCTAAAC CCTGACCCAT CTCAGAAACA GAATCTCCTA GCCCCACAGA 240
CCCTTCCAAG TAAGTCCANC GAAAGCCATG ACCACATGGA TGATATGGAT GATGAAGATG 300
ATGATGACCA TGTGGACAGC CAGGACTCCA TTGACTCGAG CGACTCTGAT GATGTAGATG 360
ACACTGATGA TTCTCACCAG TCTGATGAGC CTCACCATTG TGATGAATCT GATGAAGTGG 420
TCACTGATTT TCCCACGGAC CTGCCGTCGA CGGCCTCTTT GGCCCTCGAG ACA 473

```

## (2) INFORMATION FOR SEQ ID NO:21:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (x) SEQUENCE DESCRIPTION: SEQ ID NO:21:

AGAAGCTGTG ATCTTCAAGA CCATTGTGTC CAAGGAGATC TGTCTGATCC CAAGCAGAAG	60
TGGGTTGAGG ATTCCATGGA CCACCTGGAC AAGCAACCCA AAAGTCCGAA GACGTGAACA	120
CTCACTCCAC AACCCAAGAA TCTGCAGCTA ACTTATTTTC CCCTAGCTTT CCCCAGACGT	180
CGACGCCTCT TTGCCCTCGA GACA	204

## (2) INFORMATION FOR SEQ ID NO:22:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GTCCACACAC GCCGACCACG GAAACTCAC TACCATGAGA ATTGCAGTGA TTTGCTTTTG	60
CCTCCTAGGC ATCACCTGTG CCATACCAGT TAAACAGGCT GATTCTGGAA GTTCTGAGGA	120
AAAGCAGCTT TACAACAAAT ACCCAGATGC TGTGGCCACA TGGCTAAACC CTGACCCATC	180
TCAGAAGCAG AATCTCCTAG CCCCACAGAA TGCTGTGTCC TCTGAAGAAA CCAATGACTT	240
TAAACAAGAG ACCCTTCCAA GTAAGTCCAA CGAAAGCCAT GACCACATGG ATGATATGGA	300
TGATGAAGAT GATGACGACC ATGTGGACAG CCAGGACTCC ATTGACTCGA ACGACTCTGA	360
TGATGTAGAT GACACTGATG ATTCTCACCA GTCTGATGAG TCTCACCATT CTGATGAATC	420
TGATGAAGTG GTCAGTGATT TTCCGTCGAC GGCCTCTTTG GCCCTCGAGA CA	472

## (2) INFORMATION FOR SEQ ID NO:23:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GTCGACTGAA AATTAACCTT CAGACGCCAC ATCCCCTGAC AAGATGCCAG GCAGGTTCTC	60
TTCTCTCAC ATACTGACCC ACGGGTCCAC CCTCTCTCCC CTGGAAAGGA CACCATGAGC	120
ACTGAAAGCA TGATCCGGGA CGTGGAGCTG GCCGAGGAGG NNTTNNCCAA GAAGACAGGG	180
GGGGCCAGG GGTCCAGGNG GNGCTTGTTT CTCAGACTCT TCTCCTTCTT GATCGTGGGA	240
GGNGNCACCA CGCTCTTCTG NCTGNTGNAC TTGGAGTGG ATCCGGGCCC CAGAGGGAAG	300
AGTTCCCCCA GGGGACTCTT CTCTAATCNA GNCCTCTTGG	340

## (2) INFORMATION FOR SEQ ID NO:24:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```

GTCGACGCGC GGTGTAATAA ATGGCGAAAT GGGGGTAGGC GGCGCCTC CTGAAGAGAT      60
GGGGGCGCGCA GGTGGGGCGG TTGTCAGAGC CCCCTGACGT GGGCGCCGGG CTTTTCATCGG    120
CGATTTGATC TGGCGACCTC GGGCCGGCGC CTAAGAGGTC AGACTGCGGA GCCTGCGGGT      180
CGCCAGCGGC CCCGCCGAGT GCCGGAGGCA ATGGATGAAC AGAGCGTGGA GCGCTGKCTG      240
WCAGAGCAGA GAGCTCAATG TCCTCATTCC CGTGCTCCAC TCCAGCTACG AGAACTAGTA      300
AATTGTCGTT GGGCAGAAGA AGTAACACAA CAGCTTGATA CTCTTCAACT CTGCAGTCTC      360
ACCAAACATG AAGAAAATGA AAAGGACAAA TGTGAAAATC ACCATGAAAA ACTTAGTGTA      420
TTTTGCTGGA CTTGTAAGAA GTGTATCTAC CATCAGTGTG CACTTGGGT CGACGGCCTC      480
TTTGGCCCTC GAGACA

```

## (2) INFORMATION FOR SEQ ID NO:25:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

AGACACATAG ACCAACCGGG GAGATATGTT TGAATNTGAT GAAGATGAGA TGTCTATGT      60
GGATCTGNAC AAGAAGGAGA CCTCTGTCAT CTGGAGGAGA NTGNCCAACC CTTTTCCTTT    120
GAGNCTCAGG GNGGGCTGTC TAACATTGCT ATANTGAACA ACAACNTGAA TACCTTGATC    180
CAGCGTTCCA ACCCACTCA GNCACCAAC GATCCCCCTG AGGTGACCGT GTTCCCAAG      240
GTCACGGCCT CTTTGGCCCT CGAGACA

```

## (2) INFORMATION FOR SEQ ID NO:26:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```

GTCGACCTTG AAGATGTTTT CTAAAGAATC AAAAATGCTA CAAAGAAGTA TATCATTTTC      60
AAATATGGCT TTATCGTCTT GTTTACTTTT ACCAGGAGAT GCCACTGTCA TAATTCTTTC    120
ATGGGATAAT AATGTCTATT TTTATTCCAT AGCATTTGGA AGACGCCAGG ACACGTTAAT      180
GGGACATGAT GATGCTGTTA GTAAGATCTG TTGGCATGAC AACAGGCTAT ATTCTGCATC      240
GTGGGACTCT ACAGTGAAGG TGTGGTCTGG TGTTCTGCA GAGATGCCAG GCACCAAAAG      300
ACACCACTTT GACTTGCTGG CCGAGCTGGA ACATGATGTC AGTGTAGATA CAATCAGTTT      360
AAATGCTGCA AGCACTGT TAGTTTCCGG CACCAAAGAA GGCACAGTGA ATATTGGGA      420
CCTCAACAG GCCTCTTGG CCCTCGAGAC A

```

## (2) INFORMATION FOR SEQ ID NO:27:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

```

GTTGACGCAA GTTGCTGGGC TGGTGGGGGC CTGTCAAGTG AGGCCTGGTG GAGAAAGGTT      60
GAATTGAGAG GGCCAGGAAC AAGCTGGGAT GCAGGGGAGG CTTTCTAAAC TCTACAGTGC      120
TTCTAGAGAT GACGAGGAGG TAGGGAGTAG AAGAGAGCCG GACAGATTAG GGAGCTCCCA      180
GGGTGAGCTT GTGGGCAGSC CTSCAGAGGA GAAGAGGCTC TTCCTAGGA GCTCAGAGGG      240
ACTTGTCTTG GAAGACTGAT GGGAGATGTA TGCAGCTGTT TAGAGGCTGC TTTGGAGAAC      300
AAATGAACAT GGTCTGTT GTGCAAGCAG TTAAGTGGT TCTTTTGCT CATATATCTT      360
CCAATAAAGA CATTGAGCGA GGAGAGTTGA TACCGTCATG TTTTGGAGC TTAAGCACAG      420
ACTGGCAGGT CGACGGCCTC TTTGGCCCTC GAGACA                                456

```

## (2) INFORMATION FOR SEQ ID NO:28:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

```

GTCGACAGAA TTCACAACAT CCAAGATTC CACCTCNCA GATGTTTTCT AAAGNAATCA      60
AAAATGCTAC AAAGAAGTAT ATCATTTTCA AATATGGCTT TATCGTCTTG TTTACTTTTA      120
CCAGGAGATG CCACTGTGAT AACTTCTTCA TGGGATAATA ATGCTATTTT TTATCCATA      180
GCATTGGAAG GACGCCAGGA CACGTTAATG GGACATGATG ATGCTGTTAG TAAGGATCTG      240
TTGGCATGAC AACAGGCTAT ATTCTGCATC GTGGGACTCT ACAGTGAAGG TGCGGTCTGG      300
TGTTCCCTGC AGAGATGCCA GGCACCAAAA GACACCACTT TGGCTTGNTG GCCGAGCTGG      360
ACATGATGTC AGNGTNGGTA CAATCAAGNT TANNA                                395

```

## (2) INFORMATION FOR SEQ ID NO:29:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```

GTGGNCCGAG ATAGAGGAGG CTTCCCTCCA AGAGGACCCC GGNGTTCCCG AGGGAACCCC      60
TCTNGAGGAG GAAACGTCCA GCACCGAGCT GGAGACTGGC AGTGTCCCAA TCCGGGTTGT      120
GGAAACCAGA ACTTCCCCTG GAGAACAGAG TGCAACCAGT GTAAGGCCCC AAAGMCTGAA      180
GGCTTCCTCC CGCCACCCTT TCCGCCCCCG GGTGGTGATC GTGRCAGAGR TGGCCCTGST      240
GGCATACGGG GAGGAAGAGR TGGCCTCATG GATCGTGGTG GTCCCGGTGG AATGTTTCTA      300
GRTGGYCGTK GTGGAGACAG AGRTGKCTTC CGTKGTGGCC GGGGCATGGA CCGAGGTGKC      360
TTTGGTGGAG GAAGACNAGG TGTCCCTGGG GGCCCCCTG NTCCTTGAT GGAACAGATG      420
GGAGGAAGAA GAGGAGGACG TGGGTCGACG NCCTCTTGT CCCTCGAGAC A                                471

```

## (2) INFORMATION FOR SEQ ID NO:30:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GTCGACCGTC	TACGCCTACA	CCATGTTCTT	CTCCACGTTT	TACCACGCCT	GCGACCAGCC	60
CGGGGAGGCG	GTGCTGTGCA	TCCTCAGCTA	CGACACGCTG	CAGTACTGCG	ACTTCTTGGG	120
CTCCGGGGCG	GCCATCTGGG	TCACCATCCT	GTGCATGGCA	CGGCTCAAGA	CAGTCTTGAA	180
ATACGTGCTG	TTTCTTCTGG	GTACACTGGT	CATCGCCATG	TCCTTGACAG	TGGACCGCAG	240
GGGCATGTGG	AACATGCTGG	GGCCCTGCCT	CTTTGCCCTT	GTGATCATGG	CCTCCATGTG	300
GGCTTACCGC	TGCGGGCACC	GGCGCCAGTG	CTACCCACC	TCGTGGCAGC	GCTGGGCCTT	360
CTACCTCTCG	CCCGGCGTCT	CTACGGCCTC	TTTGGCCCTC	GAGACA		406

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

GTCGCCCAGC	AAGTGAGCAG	ATCCTCCGAG	GCACCAGGGA	ACTCCAGCCC	ATGCCATGGC	60
GGATTCTGAG	CGCCTCTCGG	CTCCTGGCTG	CTGGGCCGCG	TGCACCAACT	TCTCGCGCAC	120
TCGAAAGGGA	ATCCTCCTGT	TTGNTGAGAT	TATATTATGC	CTGGTGATCC	TGATCTGCTT	180
CAGTGNCTCC	ACACCAGGCT	ACTCCTCCCT	GTCCGTGAYT	GAGATGATCC	YTSCTCSCTA	240
TCTTTCCTYT	GTTGTCTACA	TGTGTGACCT	GCACCACCAA	GATACCATTC	ATCAACTGSS	300
CCTGGAGTGA	TTTCTTCCGA	ACCCTCATAG	GGGSAATCCT	CTACCTGATC	AMCTCCATTG	360
TKGTCTKGT	TGAGAGAGGA	AACCACCCCN	TNAATCGTTC	GTAGGGGTAC	TGGGCCTAAT	420
CGCTACGGCC	TCTTTGGCCC	TCGAGACA				448

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

TTNCAATCNC	CGATCCCCAT	CACGAATGGG	GGGCACCGGG	TTACCCCCCC	CCTCCCGCCG	60
TAGGGTAGGC	ACACNCTGAG	CCAGTCAGTG	TATCGCGCGT	GCATCCCCGG	ACATCTAAGG	120
GCATCACAGA	CCTGTNTTGG	NTCAATCTCG	GGTGGNTGNN	CGCCACTTGT	CNCTCTAAGA	180
ANATGGGGGA	CGCCGNCCGC	TCGGGGGTNG	CGTAACTAGN	TAGNATNCCA	GAGTCTCGTT	240
CGTTATCGGA	AGTAACCAGA	CANATCGCTC	CNCCAATAA	GANNNGCCAT	NCACCACCAC	300
CCACGGAATC	GAGANAGAGC	TATCAATCTG	TTGTAGGACA	TAACCCGGCT	TCTTGGTCAT	360
CATCNTGGTG	TACNCGNCCT	CTTTGNCCCT	CGAGACA			397

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) LECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

TCCTGCCTGC TGGGCCGCCT TNCACCCAAC TTCTCGCGCA CTCGAAAGGG AATCCTCCTG	60
TTTGCTGAGA TAAATANTAT NCCTGGTGAT CCTGATCTGC TTCAGTGCCT CCACACCAGA	120
CNACTCCTCC CTGTGGTGA TTGAGATGAT CCTTGCTGCT ATTTTCTTTG TTGTCTACAT	180
GTGTGACCTG CACACCAAGA TACCATTCTAT CAACTGGCCC TGGAGTGATT TCTTCCGAAC	240
CCTCATAGCG GCAATCCTCT ACCTGATCAC CNCCGTTGTT GTCCTTGTTG AGAGAGGAAA	300
CCACTCCTAC AATCGTCGCA GGGGTACTGG GCCTAATCGC TACGGCCTCT TTGGCCCTCG	360
AGACA	365

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

GTCGACGACA CGCTGTCTTC ACTACCTGAT TGCCGAGAAG ATCCCACTG TCTACACTAC	60
CTGCCTGGCC AGTAGATCCA CGGTATCTAC ACTACCTCCC TGGCCAGCAG ATTCACCCAG	120
TCTACACTAA CCGCTTGTC AGCAGGTCCA CCCTGTCTAC ACTACGTGCC TGCCAGCAGA	180
TCCAAGCTGT CTACACTCCC TGCTGGCCA GTAGATCCAT GCTATCTCCA CTACCTGCCT	240
ATCCAAGTGA TCCACCCTCT CTTTACTACC TTCCTGTCCG GCAGATTGAC CCTCTCTACT	300
CTACCTGCCT GGCCAGCAGA TCCACGCTAT CTACACTACC TGAATTACCA GATCCACCCT	360
GTCTACACTA CATGCTTGTC CAGCAGGTCC ACCCTGTCTA CACTACCTGC CTCTCCAGAA	420
GATCCACGTC AACGGCCTCT TTGGCCCTCG AGACA	455

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

GGGANTTNGG CCCAAGAGC CCGTTTGAGT NAACNAAGA AGTCAAGATT GGCCCAAGT	60
TCCAGANATG TTTGAAGAC CTGGAGAACT GTTACAGTGN AAATGAAGAA GACAGTTCCT	120
CCATTGATCA TCTGTCTCTG AATCAGAAAT CCTTCTATCA TGTAAGCTAT GGCCCACTCC	180
ATGAAGGCTG CATGGATCAA TCTGTGTCTC TGAGNATCTC TGAAACCTCT AAAACATCCA	240
AGCTTACCTT CAAGGAGAGC ATGGTGCTAG TANCANCAA CGGGAAGGTT CTGAAGAAGA	300
GACGGTTGAG TTTAANCCAA TCCATCACTG ATGATGACCT GGAGGCCATC GCCAATGACT	360
CAGAGGAAGA AATCATCAAG CCTAGGTCAT CACCTTTTAG CTCCCCGAGC AATGTGAAAT	420
ACAACCTTAT GAGGATCATC AAATACGAAT TCATCCTGAA TGACGCCCTC AATCAAAGGT	480
CGACGGCCTC TTTGGCCCTC GAGACA	506

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs



(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```
CGGTAACGCN GTTNTCCTNA GCGGAGCTCA GGGAGNACAA GAAACCCCTCC CGTGGAGCAA      60
GAANGCCACA AGCTCNCTTG ATCTTGATTA TCAGGACGAA AACAGACCGT GAAAGCGGGG      120
CCTCAGCATC CTTCTGACCT NNTGGGTNTT AAGCAGGAGG TGTCAGAAAA GTTNCCACAG      180
GGATAACTGN CTTGTGNCN CCAAGCGNTC ATAGCGACGT CGCTTTTGA TCCTTCGATG      240
TCGGCTCTTC CTATCATTGT GAAGCAGAAT TCACCAAGCG TTGGATTGTT CACCCACTAA      300
TAGGGAACGT GAGCTGGGTT TAGACCGTCG TGAGACAGGT TAGTTTTACC CTACTGATGA      360
TGTGTTGTTG CCATGGTAAT CCGTCTCAGT ACGAGAGGAA CCGCAGGTTG AGACATTGTTG      420
TGATGTGCT TGGCTGAGGA GCCAATGGTC GACGGCCTCT TTGGCCCTCG AGACA          475
```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 460 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```
GTGACCCGA TGGAGGAGGA GGAGTTGAG ACGTTCGCCT TTCAGGCAGA AATTGCCAG      60
TTGATGTCAT TGATNCATCA ATACTTTCTA CTCGANCAAA GAGATCTTTC TGAGAGAGCT      120
CATTTCAAAT TCATCAGATG CATTGGACNC AATCCGGTAT GAAAGCTTGA CAGATCCCAG      180
TAAATTAGAC TCTGGGAAAG AGCTGCATAT TAACCTTATA CCGAACAAAN AAGANCGAAC      240
TCTCACTATT GTGGATACTG GAATTGGAAT GACCAAGGCT GACTTGATCA ATAACCTTGG      300
TACTATCGCC AAGTCTGGAC CAAAGCGTTC ATGGAAGCTT TGCAGGCTGG TGCAGATATC      360
TCTATGATTG GCCAGTTCGG TGTTGGTTT TATTCTGCTT ATTTGGGTGC TGAGAAAGTA      420
ACTGTGATCA CCGTCGACGG CCTCTTGGC CNGCGAGACA          460
```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 435 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```
TCAAGCAATA CCCAAGCAAA CAATCNACTC CAANCTCGGA ANTCGNCCNA AGAGACCGTC      60
GACCCCGTGT TCACNATGGT AGMNACGCCG NCTACCATCG ANAGTTGATA GGGCAGACGT      120
TCGNGTGGGT CGTCTCCCCC CCGGGGGGCG TGCGATCGCC CCGAGGTTAT CTAGAGTCAC      180
CACACCCGCC GGCGCCCNCC CCCCNCNCGN NAAAAAAGA GGGGCTGTGN GGGNTGGTTT      240
TGNTNTGATA AATANACGCA TCCCCCCCC GNNGGGGGNN AGCGCCGTC GGCATGTATT      300
ANCTCTAGAA TTACCACAGT TATCCAAGTA GGAGAGGAGC GAGCGNCCAN AGGANCCATA      360
NCTGATTAA TGAGCCATTC NCAGTTTCNC TGTTCCGNCC GTGCGTACGN AACGACCTCT      420
TTGTNCNTAA AGNCG          435
```

## (2) INFORMATION FOR SEQ ID NO:39:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GTGACCACA CTGCTGCTCA CGCTCAGCAA CCTCATGTTC CTGGCCCCCA TGGCCGTCTC      60
AGTGCGGCGA TTCTTCCTGG TGGAGGCCTC CGTCTACGCC TACACCATGT TCTTCTCCAC      120
GTTCTACCAC GCCTGCGACC AGCCCGGGGA GCGGGTGCTG TGCATCCTCA GCTACGACAC      180
GCTGCAGTAC TGCGACTTCT TGGGCTCCGG GCGGGCCATC TGGGTACCA TCCTGTGCAT      240
GGCACGGCTC AAGACAGTCC TGAAATACGT GCTGTTTCTT CTGGGTACAC TGGTCATCGC      300
CATGTCCTTG CAGCTGGACL GCAGGGGCAT GTGGAAGTTG CTGGGGCCCT GCCTCTTTGC      360
CTTCGTGATG ATGGCCTCCA TGTGGGCTTA CCGCTGCGGG CACCGGCGCC AGTGCTACCC      420
CACCTCGTGG CAGCGCTGGG CCTTCTACCT CTGCCCCGGC GTCTCTACGG CCTCTTTGGC      480
CCTCGAGACA                                     490

```

## (2) INFORMATION FOR SEQ ID NO:40:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

CGTCTCAGGC CAGTTNCANC CTTCTCANN CAGAAGCGGN CCAAGGAAA ANCTCACTAC      60
CATGAAGAAT TGCAGTGATT TGCNTTTGCC TCCTAGGCAT CACCTGTGCC ATACCAGNTA      120
AANCAGGCTG ATTCTGGAAG TTNCTGAGGG AAAAAGCAGC TTTACAACAA ATACCCAGAT      180
GCTGTGGCCA CATGGCTAAA CCCTGANCCA TCTCAGAAGC AGAATCTCCT AGCCCCACAG      240
AATGCTGTGT CCTCTGAAGA AACCAATGAC TTTAAACAAG AGACCCAAAC AAGTNAGTCC      300
NACGAAAGCC ATGACCACAT GGATGATATG GATGATGAAG ATGATGATGA CCATGTGGAC      360
AGCCAGGACT CCATTGACTC GNNCGACTCT GATGATGTAG ATGACACTGA TGATTCTCAC      420
CAGTCTGACG AGTCTACCA TTCTGATGAA TCTGATGAAC TGGTCACTGA TTTTCCACG      480
GACCTGCCGT CGACGGCCTC TTTGACCCTC GAGACA                                     516

```

## (2) INFORMATION FOR SEQ ID NO:41:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GCCAAGACTC GTCTCAGNCC AGTTGCAGCC TTCTCANNCA AACNCCGACC CAAGGANAAC      60
TCCCCTACCA TGAGAAATGC AGTGATTTGC TTTTGCCTCC TAGGCATCAC CTGTGCCATA      120
CCAGTTAAAC AGGCTGATT C TGGAAGTTC CTGAGGAAAA GCAGCTTTAC AACAAATACC      180

```

```

CAGATGCTGT CACATGG CTAACCCCTG ACCCATCTCA GAAGCCT CTCCTAGCCC 240
CACAGAAATGC TGTGTCCTCT GAAGAAACCA ATGACTTTAA ACAAGAGANN CANCCAAGTA 300
AGTCCANCGA AAGCCATGAC CACATGGATG ATATGGATGA TGAAGATGAT GATGACCATG 360
TGGACAGCCA GGACTCCATT GACTCGANCG ACTCTGATGA TGATGATGAC ACTGATGATT 420
CTCACCAGTC TGACGAGTCT CACCATTCTG ATGAATCTGA TGAAGTGGTC ACTGATTTTC 480
CCACGGACCT GCCGTCGACG GCCTCAATGN CCCTCGAGAC G 521

```

## (2) INFORMATION FOR SEQ ID NO:42:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

```

GCAAGCAANC AATCCAACCC AAGNTNGGGA NTCGNCCNAA GAGNCCGTTG ANCAGAAGCC 60
ANTNATGGAT GANCAAGCGCG ACCTTATCTC CAACAATGAG CAACTGNCCA TNCTGGGNCC 120
GGNCGCCCTG GGGCNCCGGA GAGCAAGTGC ANCCGCGGAG CCCTGTACAC AGGCTTTTCC 180
ATCCTGGTGA CTCTGCTCCT CGCTGGCCAG GCCACCACCG CCTACTTCCT GTACCAGCAG 240
CAGGNCCGGC TGGACAAACT GACAGTCACC TCCCAGAACC TGCAGCTGGA GAACCTGCGC 300
ATGAAGCTTC CCAAGCCTCC CAAGCCTGTG AGCAAGATGC GCATGNCCAC CCCGCTGCTG 360
ATGCAGGCGC TGCCCATGGG AGCCCTGCCC CAGGGGCCCA TGCAGAATGC CACCAAGTAT 420
GGCAACATGA CAGAGGACCA TGTGATGCAC CTGCTCCAGA ATGCTGACCC CCTGAAGGTG 480
TACCCGCCGT CGACGGCCTC TTTGGCCCTC GAGACA 516

```

## (2) INFORMATION FOR SEQ ID NO:43:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

```

TGCTATCCNA GNATAAAATA AGACCCTGCA ANTATTAATC TTNTTTGTTT CCTCGTCATT 60
GTTCTCGTTC CCTNTCTTCG TTGTTTCTNN TTCTGCACAA TATNTTCAAG CTATACCGAG 120
CATACAATCA AACTCCAAGC TCGGAATTCTG NCCAAAGAGG CCGTCGAGCC GAATTCTCCA 180
CNAGAATAGC ATTTCTGCTC ATCTGCATGG TCGCAGTCAC GAGCCAGATG NCCTGNTTTN 240
CCACAGTTGT AGCAGCATTG CTCTCGCTCT CTCTTGGGCT CCTTGCACTC CTGCGCAATG 300
TGGCCGCCTC TACCGCAGTT ATAGCAGGCA TCCTCCTGAA GATCACAATC CTGCGCAAGA 360
TGACCAGACT CACCACAGCG ATAACAAATA TCTGGAAGAG ACGAGGAAAC AAAGTGGAAA 420
CCTCTATCCG AGGTAAAACC ACCTCTGCCA CGGCTTCTCA TTCCACGACC ACGGCCTCTT 480
TGGCCCTCGA GACA 494

```

## (2) INFORMATION FOR SEQ ID NO:44:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 654 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

( SEQUENCE DESCRIPTION: SEQ ID NO:44:

```
CCTCCANATN ANCTTTNTTC CTCTCATTGT NTCGTCCCTC CTCCTTGTTT TTNCTGCCC      60
AAAATCCANC AAANCCAACA ACCATCCNCN CCACCTGGAA GTNGCCCAAA GAGGCCGNAC      120
CAAGAAGTGT CGATTCCTTT GTNTGNAGGA GCGACCAGGA ACATCTACGG TTGAGAAGAA      180
AGAAAGANTG CCTTCGTCGA TGTCTTCCTG TGTGAANTTT CCAGACATAG CCCAGTCGAC      240
CAGCCTTCCC CACNAGACTG GAGCGTCTCT ATTGTATNTG GGTCCCTGTA AGAGTAGAAG      300
GGTGAAAATC CCANTGTGTC TGAGTNTTGC GCCNCCACCA TAAACACCGC CTTTTTCTCG      360
AATTTCTGTA TNCAAGAAAN TGTCAGTCAT CACACGTGCA AGGATNTTAA GACTGNCATG      420
ATCTGGGNCC GTGTAGGGGN CAGNTCGGAT NCATTACCCC ACGTAATTCA CCGGGANGGG      480
CATCAGGAAG TGAGTCTTCA TCTCCCAGGG CGTGNAGGTG GGTNCCATGA CCAGCTTCCT      540
AATGACCTGG GAGCCATGGG GAACGTGGGC ATCTCCACCA GAGCTACTGG GCACAGGTTT      600
CTCGACCGTG TGTGGNCGCA CAGACCGTCG ACGGCCTCTT TGNCCCTCGA GACA          654
```

(2) INFORMATION FOR SEQ ID NO:45:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 500 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```
GTCGACCTGA GAATCTGGAA AAATTGGAGA AGTTGGGTAT GAGCTCAGAC CTGGTGAGCA      60
GGCTGCCTAC CATTATAGA AATGCACATG ACATCAAGAA TAAGAGCTCT GCGCCACGCA      120
GAGTGCCCTC TCTTTTGTG CCACAGGGGA CTTCTGAAAG AAAAGACAGT TCAGGTTCTG      180
TGTCCCAMA CACTCTTAGC CAGGAGGAGG GTGATCAGAT CTGTTTGTGC CATATCCGGA      240
AAAGTTGTAG CTTTCAAGAT AAGTGCCATA GAGTTCATT CCATTTGCCG YATCGATGGC      300
AATTTCTGGA TAGAGGCAA TGGGAGGATT TGGACNACAT GGAACNTATT GTAGAGNCAT      360
ATTGCAATCC CCCCATAGAA AGGATCCTGT GCTCTGAGTC AGCCAGTACC TTCACTCTC      420
ATTGTCTGAA CTNTAACGCC ATGACTTACG GTGCTACCCA GGCTCGCCGC CTCTCCACGG      480
CCTCTTTGGC CCTCGAGACA                                     500
```

(2) INFORMATION FOR SEQ ID NO:46:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 466 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```
GTCGACACAA ATGTTTCCTT GGATAATCCA GCTTTACATG GTGAGAACCA TGCTAGAGTC      60
CCTCATTGCA GACAAAAGTG GTTCCAAGAA AACCTTGAGA AGTAGCCTTG AGGGGCCCCAC      120
CATATTGGAC ATAGAAAAAT TTCATCGAGA GTCATTCTTC TACACTCACT TGATAAATTT      180
CAGTGAAACG CTCGAGCAGT GCTGTGACCT TTCGCAGCTG TGGTTCGGAG AGTTCCTTCCT      240
GGAGCTGACC ATGGGCAGGA GGATCCAGTT CCCCATTGAG ATGTCGATGC CCTGGATCCT      300
GACGGACCAC ATCTTGAGGA CCAAGGAGGC ATCGATGATG GAGTACGTGC TCTACTCCCT      360
GGACCTGTAC AATGACAGCG CCCACTACGC GTCACACAGG TTCAACAAGC AGTTCCTCTA      420
CGACGAAATT GAGGCCGAGG TCACGGCCTC TTTGGCCCTC GAGACA          466
```

(2) INFORMATION FOR SEQ ID NO:47:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 384 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GTCGACGGAA GTTGATTTTT AATGATAAAG TACAATGAAG GGAGGGCAGA GGGGCTAAGC      60
CTAGCTGTCT GGGGTGCTGT GGTGGTGGA GACTGGCTAC ACAAACTGTT GCTGCTGCTG      120
CTGCTTCTTG GTGGCCGCCT TGCTGGCGAG GTCCTTGGCC TTCTCTGTAG CTGCCAGTGC      180
CGTCTCCTTT GCCTTCTCCT TGGCTTCCTT GGCTGTCTCA ACAAGTGTTT TGAAGGGGGC      240
CTGCGCTTGC AGCTTAGCCA AGATATATTC AAAACCCCTC ATAGTCTTGG TCACGTTGCT      300
TTTGAACCGG GCAAGACCAA ATTCCTGGAC AGCTCTGGCT ACACAACTG TTGCTGGTCA      360
ACGGCCTCTT TGGCCCTCGA GACA

```

(2) INFORMATION FOR SEQ ID NO:48:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GTGACGGGAC AAAAATCTAG GGAGGCACCA ATCCTGAAAG AGTTTAAGGA AGAAGGGGAA      60
GAGATACCTA GAGTAAAACC AGAGGAGATG ATGGATGAGA GACCCAAAAC AAGATCCCAG      120
GAACAGGAGG TGTTAGAGAG AGGAGGGAGA TTTACAAGAT CCCAGGAAGA GGCTAGAAAA      180
AGTCATCTGG CCAGACAGCA GCAGGAGAAG GAAATGAAAA CAACATCTCC CCTTGAGGAG      240
GAAGAAAGAG AAATAAAATC TTCACAAGGC TTAAAGGAAA AATCGAAGTC TCCTTCCCTC      300
CCTCGACTGA CTGAAGATCG AAAGAAGGCC CCACTTGTAG CGCTGCCAGA GCAAAGTCCC      360
AGCGAGGAGG AGACTCCTCC ACCTTTACTA ACAAAGGAAG CATCTTCTCC ACCACCTCAT      420
CCACAGCTCC ATAGCGAAGA AGAAATAGAG CCCATGGAAG GCCCAGCCCC CCTGTCTC      480
ATTCAGTTAT CTCCTCCTAA TACAGATGCT GACACCAGGT CGACGGCCTC TTTGGCCCTC      540
GAGACA

```

(2) INFORMATION FOR SEQ ID NO:49:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 520 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GTGACGTCG GTGGTGCGAG CGGCGGCGGC GCGGTTCCA GCATGAAGAG GAGAGCTGGC      60
CTGGGGGGCA GCATGAGGTC AGTGGTGGGC TTCTTGTCCT AGCGGGGCTC GCATGGGGAC      120
CCCTTGCTCA CTCAGGACTT TCAGAGGAGA CRCCTGCGGG GCTGCAGAAA CCTCTACAAG      180
AAGGACCTCC TCGGCCACTT CGGCTGTGTC AATGCCATTG AATTCTCCAA CAATGGAGGC      240
CAGTGGCTGG TCTCAGGAGG AGATGACCGC CGGGTTCTGC TATGGCATAT GGAACAAGCC      300
ATCCACTCCA GGGTCAAGCC CATACAGCTG AAAGGAGAGC ACCATTCCAA CATTTTCTTC      360

```

CTGGCTT .CAGTGGGTA CACTAAAGTG TTCTCTGGAG G ;ATGA GCAAGTTATC 420  
 CTCCATGATG TTGNAAGCAG TGAGACATTG GACGTGTTTG CTCATGAAGA TGCAGTATAT 480  
 GACTTGTCTG TGGTCNGCGC CCTCTTTGGC CCTCGAGACA 520

## (2) INFORMATION FOR SEQ ID NO:50:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GTCGACTCCA GACACACCCC CCAGTCGAGC CCTGCAGCCA AACAGAGCCT TCACAACCAG 60  
 CCACACAGAG CCTGCCTCAG CTGCTCGCAC AGATTACTTC AGGGCTGGAA AAGTCACACA 120  
 GACACACAAA ATGTCACAAT CCTGTCCCTC ACTCAACACA AACCCCAAAG CACAGAGAGC 180  
 CTGCCCTCAGT AACTCAAAC AACCTCAAAG CTGCATCATC ACACAATCAC ACACAAGCAC 240  
 AGCCCTGACA ACCCACACAC CCCAAGGCAC GCACCCACAG CCAGCCTCAG GGCCACAGG 300  
 GGCACTGTCA ACACAGGGGT GTGCCAGAG GCCTACACAG AAGCAGCGTC AGTACCCTCA 360  
 GGATCTGAGG TCCCAACACG TGCTCGCTCA CACACACGGC CTGTTAGAAT TCACCTGTGT 420  
 ATCTCAGCA TATGCACACG CACAGCCCTC AACGGCCTCT TTGGCCCTCG AGACA 475

## (2) INFORMATION FOR SEQ ID NO:51:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

CCTGCCACAA TAATNTCCNA AGCCTAAAAC CCGAGCAATA CAANCNAACC CAAGCTCGGA 60  
 AATCGGGCCA AAGAGACCGT TCTTAGNTGG TGGAGCGATT TGTCTGGTTN ATTCCGATAA 120  
 ACGAACGAGA CTCTGGCATG CTAAGTAGTT ACGCGACCCC CGAGCGGTG GCGTCCCCCA 180  
 ACTTCTTAGA GGGACAAGTG NCGTTCANCC CACCCGAGAT TGAGCAATAA CAGGTCTGTG 240  
 ATGCCCTTAG ATGTCCGGGG CTGCACGCGC GCTACACTGA CTGGCTCAGC GTGTGCCTAC 300  
 CCTACGCCGG CAGGCGCGGG TAACCCGTTG AACCCATTC GTGATGGGGA TCGGGGATTG 360  
 CAATTATTCC CCATGAACGA GGAATTCCCA GTAAGTGCGG GTCATAAGCT TCGTTGATT 420  
 AAGTCCCTGT CGACGGCCTC TTTGGCCCTC GAGACA 456

## (2) INFORMATION FOR SEQ ID NO:52:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GTGCGRRCAA SMYTYTMMMA CTGTGGNGGG GCTCTACCCN TGAGGGCCTG GCCGCARCN 60

```

GGCTGSGGGC SACTAT GAACAGRTCG AGAAMGTGKN CGATT CCGGAGTACA 120
AGCTRCTCTY CGAGGGTGCA GGTAGGCAAC CCTGGAGACA TGACKCTGA GGGMCGATTA 180
CTTTGAGYAC GAGGTAAARC TGAACAAGTT GTSCTTCCTG ANACAGTWCC ACCTTGGTGT 240
CTTCTATRCC TTCGTGAAGC TCAAGGAGCA GGAGTGTCKC AACATCGTGT GGATCGCTGA 300
ATGTATCTRC CAACGCMMS GCRMMYCSMA MSWCAWCCWY ATTCTSTRTC CTKSYAASGT 360
CWCAMTGAAN CWAGCCCTCT CAATTGCACT GCACTGTGTG TGTGTGTGTG TGTGTTGTGC 420
GTGTGTGTG CGTGTGTGTG TATGTGGTCT GTGACAAGCC TGTGGCTCAC CTGGTCGACG 480
GCCTCTTTGG CCCTCGAGAC A 501

```

## (2) INFORMATION FOR SEQ ID NO:53:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

```

CCNCCGTTTG TTGTNNTGCA CCAAANANCC NCNAATTGNC CANANAAAAT TGATGGGAAG 60
ACCACTTAAA GGGGGGGNAN TTAGGCGGGN CAAAGACAAG GCACCCNACA AGATGTCGTT 120
TGTTCCAGAG CTGATTGAGG GGTATCTCGG AAGNAACACN GAAACTTTTT TCCTTCCTTC 180
AATTCACGC ACACTACTCT CTAATGAGCN NCGGAATACG GCCTTCCTTC CAGTTACTTG 240
AATNTGAAAT AAAAAAAGT TTGCTGTCTT GCTATCCAAG TATAAATAGA CCTGCAATTA 300
TTAATCTTTT GTTTCCTCGT CATTGTTCTC GTTCCCTTTC TTCCTTGTTT CTTTTCTGTC 360
ACAATATTTT AAGCTATACC AAGCATACAA TCAACTCCAA GCTCGGAATT CGGCCAAAGA 420
GGCCGTCGAC GAACCACCGG CTGAAAATTG GCTTCTTCAA CCAGCAGTAT GCAGAGCAGC 480
TGCGCATGGA GGAGACGCCC ACTGAGTACC TGCAGCGGGG CTTCAACCTG CCCTACCAGG 540
ATGCCCGCAA GTGCCTGGGC CGCTTTGGCC CTCGAGACA 579

```

## (2) INFORMATION FOR SEQ ID NO:54:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

```

CCTGCNCCAA NANTTCNAA CCNAATAACC CAANAANACC AATCCNNNCT CCANCTGGGG 60
AATTCGGNCC NAAGAGACCG TTGTNTTGAT GACAAGTCGA AGCCAANAAT ACCATNCAAC 120
CTGCTCCCAA TCATGCAGGN TNCNGCCACT GCTGCCCTTG CCGTCCCTCC TCTGCACCAT 180
GGCTNCTCCT GCAACCAGGT CCTCTCTGCA CCACITGCTG CTGANACGCC GACCGCCTGC 240
TGCTTCAGCT ACACCTCCCG ACAGATTCCA CAGAATTTC A TAGCTGACTA CTTTGAGACG 300
AGCAGCCAGT ACTCCAAGCC CAGTGTGATC TTCCTAACCA AGAGAGGCCG GCAGGTCTGT 360
NNTGACCCA GTGAGGAGTG GGTCCAGAAA TACGTGAGTG ACCTGGAGCT GAGTGCCAGA 420
GGGTCCAGA AGCTTCGAGG CCCAGCGACC TCAGTGGGCC CAGTGGGGAG GAGCAGGAGC 480
CTGANCTTG GGAACATGCG TGTGACCTCT ACAGCTACCT CGTCGACGGC CTCTTTGGCC 540
CTCGAGACA 549

```

## (2) INFORMATION FOR SEQ ID NO:55:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid

STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```
GTCGACCTCC CAGGTCATTA GGAAGCTGGT CATGGAACCC ACCTTCAAGC CCTGGCAGAT      60
GAAGACTCAC TTCCTGATGC CCTTCCCGGT GAATTACGTG GGTGAATGCA TCCGAAGTGT      120
CCCCTACACG GACCCAGATC ATGCCAGTCT TAAAATCCTT GCACGTTTGA TGAAGTCCAA      180
ATTCTTGCAT ACAGAAATTC GTGAAAAAGG CGGTGCTTAT GGTGGAGGCG CAAAAGTCCAG      240
CCACAATGGG ATTTTCACCC TTTACTCTTA CAGGGACCCA AATACAATAG AGACGCTCCA      300
GTCTTTTGGG AAGGCTGTCG ACTGGGCTAA GTCTGAAAAA TTCACACAGC AAGACATCGA      360
CGAAGCCAAA CTTTCTGTCT TCTCAACCGT AGATGCTCCT GTCGCTCCTT CAGACAAAAGG      420
AATGGACCAC TTCTGTACG GCCTCTTTGG CCCTCGAGAC A                      461
```

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 511 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```
GTCGACAATA ATTCCACCTC ACCAGGATAA TACCCATCCT TCAGCACCAA TGCCTCCACC      60
TTCTGTTGTG ATACTGAATT CAACTCTAAT ACACAGCAAC AGAAAATCAA AACCTGAGTG      120
GTCACGTGAT AGTCATAACC CTAGCACTGT ACTGGCAAGC CAGGCCAGTG GTCAGCCAAA      180
CAAGATGCAG ACTTTGACAC AGGACCAGTC TCAAGCCAAA CTGGAAGACT TCTTTGTCTA      240
CCCAGCTGAA CAGCCCCAGA TTGGAGAAGT TGAAGAGTCA AACCCATCTG CAAAGGAAGA      300
CAGTAACCCCT AATTCTAGTG GAGAAGATGC TTTCAAAGAA ATCTTTCAAT CCAATTCACC      360
GGAAGAATCT GAATTCGCCG TGCAAGCGCC TGGGTCTCCC CTAGTGGCTT CCTCTTTATT      420
AGCTCCTAGC AGTGGCCTTT CAGTTCAAAC TTCCCACCAG GGCTTTACTG CAAAACAAGC      480
ACGGTCAACG GCCTCTTTGG CCCTCGAGAC A                      511
```

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 483 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```
GTCGACAGTC CAAAGTCTCA AGACAGTTAT CCTGTTAGTC CTCGACCTTT TAGTAGTCCA      60
AGTATGAGCC CCAGCCATGG AATGAATATC CACAATTTAG CATCAGGCAA AGGAAGCACC      120
GCACATTTT CAGGTTTGA AAGTTGTAGT AATGGTGTA TATCAAATAA AGCACATCAA      180
TCATATTGCC ATAGTAATAA ACACCAGTCA TCCAAGTTGA ATGTACCAGA ACTAAACAGT      240
ATAAATATGT CAAGATCACA GCAAGTTAAT AACTTCACCA GTAATGATGT AGACATGGAA      300
ACAGATCACT ACTCCAATGG AGTTGGAGAA ACTTCATCCA ATGGTTTCCT AAATGGTAGC      360
TCTAAACATG ACCACGAAAT GGAAGATTGT GACACCGAAA TGGAAGTTGA TTCAAGTCAG      420
TTGAGACGCC AGTTGTGTGG AGGAAGTCAG GCCGCGTCTA CGGCCTCTTT GGCCCTCGAG      480
ACA                      483
```



## (2) INFORMATION FOR SEQ ID NO:58:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GTCGACGAGG TGGTGATCAT GGAAGACGCC CCTGACTATT ATGCAGTGGA AGACATTTTC      60
AGCGAGATCT CAGACATTGA TGAGACAATT CATGACATCA AGATCTCTGA CTTTATGGAG      120
ACCACCGACT ACTTCGAGAC CACTGACAAT GAGATAACTG ACATCAATGA GAACATCTGC      180
GACAGCGAGA ATCCTGACCA CAATGAGGTC CCCAACAACG AGACCACTGA TAACAACGAG      240
AGTGCTGATG ACCACGAAAC CACTGACAAC AATGAGAGTG CAGATGACAA CAACGAGAAT      300
CCTGAAGACA ATAACAAGAA CACTGATGAC AACGAAGAGA ACCCTAACAA CAACGAGAAC      360
ACTTACGGCA ACAACTTCTT CAAAGGTGGC TTCTGGGGCA GCCATGGCAA CAACCAGGAC      420
AGCAGCGACA GTGACAATGA AGCAGATGAG GCCAGTGATG ATGAAGATAA TGATGGCAAC      480
GAAGGTGACA ATGAGGTCAC GGCCTCTTTG GCCCTCGAGA CA                      522

```

## (2) INFORMATION FOR SEQ ID NO:59:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GTCGACAGAT CATGTTGGAA GAGCCCCCAG TAGCAAAAGT GTTAGAGCCT TCAGAAACCC      60
TTGTGGTATC ATCAGAGACA CTTACTGAGG TGTACCCTGA GCCAAGCACA TCAACAACAA      120
TGGATTTTCC AGAGTCATCT GCAATTGAAG CGCTAAGATT GCCAGAGCAG CCTGTAGACG      180
TACCATCGGA GATTGCAGAT TCATCCATGA CAAGACCGCA GGAGTTGCCG GAGCTGCCA      240
AGACCACAGC GTTGGAGCTG CAGGAGTCGT CGGTGGCCTC AGCGATGGAG TTGCCGGGGC      300
CACCTGCGAC CTCCATGCCG GAGTTGCAGG GGCCCCCTGT GACTCCAGTG CTGGAGTTAC      360
CTGGGCCCTC TGCTACCCCG GTGCCAGAGT TGCCAGGGCC CCTTCTACC CCAGTGCCCTG      420
AGTTGCCAGG GCCCCCTGCG ACAGCAGTGC CTGAGTTGCC AGGGCCCTCT GTGACACCAG      480
TGCCACAGTT GTCGCAGGAA TTGCCGTCAA CGGCCTCTTT GGCCCTCGAG ACA          533

```

## (2) INFORMATION FOR SEQ ID NO:60:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

CCACCAGACA TAAAGTACTG ACATGATCAG AGGAATCATC AGCAACTGCA TNTCCATTGC      60
TAAGCCAGTA ATCAGCATGC AAATCCAGTT AAAGAGGAGC ATGAATAAAT AGTCTGCTGG      120
CCTCCCATCA AAAGCTCCTG TTTCAAGTCG CGTAGAATAC TGATATAAGA AATATANATT      180

```

GACCAAA	TAGAAATCCAG	TTCCTGGACC	CACAGGGAAA	TAGAGGTGG	CAGTGATTGN	240
CCTCCAAATC	TGAAAGCGAT	ANAGGAAGGC	TTCGGGCCAG	AGGAAGAGGT	AGGCCGGGCT	300
GATGAGGCCG	AGTTTGCCGA	CCAAGGGCAC	GGNGACGGTG	GCGGCGAACC	AATAGCGCGT	360
GATCGCCGGG	ATGCTCCTGA	ACCACTCTCC	GATGTCCGAC	ATCTTCGACC	CACAGGTAGC	420
CAAGATGCAC	AAGACCGCCC	GACTCCCGC	GCCGACCCCC	TCACGACGCG	GCCGGCTCCG	480
CGACTGTTAG	GTGTCTAGGT	GGAAGCCGCG	TCGAC			515

## (2) INFORMATION FOR SEQ ID NO:61:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

ATNCNGGAGN	CCCAGATGCT	GTGGGCCATG	ATCGCANNTT	GNNTGAGAGA	ATTGGCAGAA	60
NCAGANTACT	CCTAGCNAGA	NCAGTATTNT	GTGTNACTCT	GGAGAATTNC	AGTGATGNAA	120
AAAAANAGAC	CNGTNCAAGT	AAGTCCAGCG	AAAAGCATGC	CCACATGGAT	GAANTGGATG	180
ATGAAGATGA	TGCCNNCCNT	GNNGNCAGCA	GGAACCTCTN	TNNCTGCGNG	NCNACTCNTG	240
NTGNTGTAGA	TGANGCTGGT	NAAGCNNANC	AGTCTGNTGA	GNCTCCTCGA	GTCTGATGGA	300
TCTNATGAGC	AGANCGNTGA	TTCGTCNGCC	GCCGTNCTCC	TTNGAGCCCN	CNAGACA	357

## (2) INFORMATION FOR SEQ ID NO:62:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

CTTGTAGATG	GAGCGGGGAG	NCAGACTNCT	GGGNGCTGCG	TGANTGCTGA	CGTGAGATGG	60
ATTAATTAAT	GGCNAGCAAG	NATGGNGNCT	NCGAGCCCT	CCCTGNNGCT	NCCTNCCAGN	120
NGTGGCAATN	GCGTACGTGG	NCAGACTTCA	GGNAGAAAAA	AAAAAANGG	GNCNCGTAAG	180
CTGCTGCGGG	NNCAGCAGCT	TGAGACTGNC	AAGTGACTCA	GATGCAGAGT	CAGACTNTCG	240
GGCTAGCTCT	AACAACCTCN	CCGTCTCCAA	CACCAGCACC	GAGGGCTTCG	GGGACATCAT	300
GTCTTTGACC	AGCAGCCTCT	ATCGGAACCA	CAGTACCAGC	TTCAGTCTTT	CAAACCTCAC	360
ACTNCCGTCG	NCGGCCTCNT	TGGCCTTTNG	AGGCGA			396

## (2) INFORMATION FOR SEQ ID NO:63:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

GTCGACCCCA	GATGAAATGT	CATGGCAAAT	TTGATAAAAA	CCAAGAGGGA	GTGAAACTGA	60
------------	------------	------------	------------	------------	------------	----

CGCTGGGGGA CAGGGTC AAGTCGAGGG AAGGTGAAAC CAAAA TGAGCATGCG 120  
 TGGTGGGGCA GGAAGGACA CCATCACTCC AGAGACAGTA TGGTAACAAA GGGACAGGAA 180  
 TGGTCCAGGC CAGCTTCAGG CTCTTCAGAA GCCAGAGAGA TGTCCAAGTC TACCAAACCG 240  
 AGTTCTCCAA GGCTTTTCAA GAAATGGGAT TTGCTTGCAA GATGAATGAG GGAGGAGGTC 300  
 CCATGGCTTC TAAGAGATCA ACCCAAGTCT TCCAATACTC ACTGCTAAGT CCCACCTGGG 360  
 TCCCCCAGAG CCAGGAAGCT CCCTGGTGGC AGGTCCCCCT CTTGCCCTCA CGGCCTCTTT 420  
 GGCCCTCGAG ACA 433

## (2) INFORMATION FOR SEQ ID NO:64:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

GTCGACAAAA TAGTCTGT AAAGAATACC GAATGGAAGT TCCATCTTCG TTTTCAGAAG 60  
 ACATGTCAAA TATCAGGTCA CAGCATGCAG AAGAACAGTC CAACAATGGT AGATATGACG 120  
 ATTGTAAAGA ATTTAAAGAC CTCCACTGTT CCAAGGATTC TACCCTAGCT GAGGAAGAAT 180  
 CTGGGTTCCC TTCTACTTCT ATCTCTGCAG TTCTGTCTGA CTTAGCTGAC TTGAGAAGCT 240  
 GTGATGGCCA AGCTTTGCC TCCAGGACC CTGAGGTTGC TTTATCTCTC AGTTGTGGCC 300  
 GTTCCAGAGG ACTCTTTAGT CATATGCAGC AACATGACAT TTTAGATACC CTGTGTAGGA 360  
 CCATTTGAATC TACAATCCAT GTCGTCACAA GGATATCTGG CAAAGGAAAC CAAGCTGCTT 420  
 CTTGGTCAAC GGCCTCTTTG GCCCTCGAGA CA 452

## (2) INFORMATION FOR SEQ ID NO:65:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

CTNAAANTTA CCATCACAGT TNCTACAATC GGCTCTTTCC AATTTGGCNA CAACNCTGGG 60  
 TCATCAATGC TCCTGAGAAG ATCATAAAGG AATTTATCAA TAAAACTTTG TCGGACAAGG 120  
 GAAATNCCCC ACCCTCTGAG GTGCTGCTCA CGTCTCTCTG GTCCTTGCTC GTGACCATAT 180  
 TTTCCGTCGG GGGNATGATC GGCTCCTTTT CCGTCGGACT CTTCTGTCAC CGCTTTGGCA 240  
 GGCGCAANNC AATGCTGATT GTCAACCTGT TGGCTGTAC TGGTGGCTGC TTTATGGGAC 300  
 TGTGTAAAGT AGCTAAGTCG GTTGAAATGC TGATCCTGGG TCGCTTGCTT ATTGGCCTCT 360  
 TCTGCGGACT CTGGTCGACG GCCTCTTTGG CCCTCGAGAC A 401

## (2) INFORMATION FOR SEQ ID NO:66:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

GTTGAGAGCA GCATGTTTTN NCCACTGAAA CTCATCCTGC TGCCAGTGTT ACTGGATTAT      60
TCCTTGGGCC TGAATGACTT GAATGTTTCC CCGCCTGAGC TAACAGTCCA TGTGGGTGAT      120
TCAACTCTGA TGGGATGTGT TTTCCAGAGC ACAGAAGACA AATGTATATT CAAGATAGAC      180
TGGACTCTGT CACCAGGAGA GCACGCCAAG GACGAATATG TGCTATACTA TTA CTCCAAT      240
CTCAGTGTGC CTATTGGGCG CTTCCAGAAC CGCGTACACT TGATGGGGGA CATCTTATGC      300
AATGATGGCT CTCTCCTGCT CCAAGATGTG CAAGAGGCTG ACCAGGGAAC CTATATCTGT      360
GAAATCCGCC TCAAAGGGGA GAGCCAGGTG TTCAAGAAGG CGGTGGTACC GCATGTGCTT      420
CCAGAGGAGC CCAAAGAGCT CATGGTCCAT GTGGGTGGAT TGATTAGAT GGGATGTGTT      480
TTCCAGAGCA CAGAAGTGAA ACACGTGACC AAGGTAGAAT GGATATTTTC GTCGACGGCC      540
TCTTTGGCCC TCGAGACA

```

## (2) INFORMATION FOR SEQ ID NO:67:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```

GTGGAGAAAA TTGCTGCTGA GAAGGACATT TTGAAGGTTT TGTGGGCTGA AAAAGCTGTT      60
TCTGGAATCA CCCCTAGATC TTTCTTGAAG ACTTGAATTA GATTACAGCG ATGGGGACAC      120
AGAAGGTCAC CCCAGCTCTG ATATTTGCCA TCACAGTTGC TACAATCGGC TCTTTCCAAT      180
TTGGCTACAA CACTGGGGTC ATCAATGCTC CTGAGAAGAT CATAAAGGAA TTTATCAATA      240
AAACTTTGAC GGACAAGGGA AATGCCCCAC CCTCTGAGGT GCTGCTCAGC TCTCTCTGGT      300
CCTTGTCTGT GGCCATATTT TCGTCGGGG GTATGATCGG CTCCTTTTCC GTCGGACTCT      360
TCGTCAACCG CTTTGGCAGG CGCAANTCAA TGCTGATTGT CAACCTGTTG GCTGTCACTG      420
GTGACTGCTT TATGGGACTG TGTAAGTAG CTAAGTCGGT TGAAATGCTG ATCCTGGGTC      480
GCTTGGTTAT TGGCCTCTTC TCGGACTCT GGTGACGGC CTCTTTGGCC CTCGAGACA      539

```

## (2) INFORMATION FOR SEQ ID NO:68:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```

GTTGACCCCA TTTCCACCA CCAAGCAAGC AGAGCCTGTT GTTTGTGCA AAATCAAAAC      60
TGCACATCCA CAGAGCAGAG ATCTCAAAGA TTATGCGAGA ATGTCAGGAA GAAAGTTTCT      120
GGAAGAGAGC TCTGCCTTTT TCTCTGTAA GCATGCTTGT CACCCAGGGA CTAGTCTACC      180
AAGGTTATTT GGCAGCTAAT TCTAGATTG GACCATTGCC CAAAGTTGCA CTTGCTGGTC      240
TCTTGGGATT TGGCCTTGGA AAGGTATCAT ACATAGGAGT ATGCCAGACT AAATTCCATT      300
TTTTTGAAGA TCAGCTCCGT GGGGCTGGTT TTGGTCCGTC GACGGCCTCT TTGGCCCTCG      360
AGACA

```

## (2) INFORMATION FOR SEQ ID NO:69:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(B) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

GTCGACCTCG	GTAAATGCCT	CAGTTCCCCT	CCCAGATGGA	GGCATCGTTG	TGAGAGTCTG	60
ATTGGGAGGG	GAATATGAAA	ATGTTTTTCG	AAGATAAAAG	TACTACACAG	ATGTGAGGTG	120
GTTTTGCCTT	GGAAGAAAGT	GCTCCTTAGA	TGTGTCTGGA	TGTTATGCAG	AGTGATCGTG	180
GCGTGTCAAT	CTTCTTTTTC	GGTGTCTTTC	AGCCTGAGAC	ATAAGGTAAT	TGTCAGAAAA	240
GGGAGACGTA	GAAGTGTGGA	TCTGTGGAAG	CTCACTCTTA	ACAAGAATTC	TAAGATGCAC	300
ATTAAAGTAC	TTGCCATGAC	GTGAGGTGTT	GTACACACGTC	AACCCCTGAGA	TGCTGTCACT	360
GTCCACAGGG	ACTTGACATT	TATGTTACCC	AGGAATGACT	GTGTAAATGT	GCAGGTGCAG	420
GCCGGGCGCC	GTGGCTCAGT	GCCTGTAATC	CCAGCACTTT	GGGAGCCCCG	TCGACGGCCT	480
CTTTGGCCCT	CGAGACA					497

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GTAGACANCA	NTAGAAAAAC	AAAAATCTCA	TAATGCAAAA	GCATCAAGTG	TTTGAAGTCTG	60
AGAAGCGCCT	TGTATGCCCA	GTTACTCTCG	TTCTCCCTCA	GCTCTTGCTT	GTGCTTCTCC	120
ACCTGCCATT	CCACTTTGGC	CTGGTACTGC	CTGTAGTCTT	CCTGGCAGGC	CCCAGTCCA	180
GTTCTTTTGA	GCAGCTGGGC	ATCCAAGAAG	AGGTCATTGC	TGTGGAAGGA	GCCCTCTCGC	240
TCCCTCCCCA	GCCTCTCAAT	CACAGCCAGG	AGCTCTGCCT	GCTGCTGCCT	CTGCTCTCTC	300
ACAGAGCCCC	AGTTGTTGAA	GGCACAGTAC	CTTCTCTCAC	ACTCCCGCGC	CAGGTCTTTC	360
AGGCTGCAGT	TGTCCGTGTT	TGCTACATAG	TCATCCAGGG	CCTGGCCCCG	TCGACGGCCT	420
CTTTGGCCCT	CGAGACA					437

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 518 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

CCTGCNCNAA	ANNANTCCAA	GCNAANNCCC	AAACAATCCC	AATNCCNACC	CCAAGCTNNG	60
GAGTTCGGCC	CAAAAGAGGC	CCNNCGAAG	TAGATTNCAG	TGAGCCAAGA	TCGTNCCACT	120
GCACNCCAAG	CCNGGGCANC	CAAGAGCGAA	ACTCCGTNC	CNCNNNANAA	AGAGAAAATT	180
AGCCGGGCGT	GGTGGCGTTA	ATCCCANCTA	CTTGTGAGGN	TAAGGGAGGA	GAATTGCTTG	240
AACCCAGGAG	GCAGAGGTTG	CAGTGAGCTG	AGATCACGCC	ATTGCACTCC	AGCCTGGGCC	300
ACAAGAGCAA	GACTCCATCT	CCCCAAAAAA	AAAAAAATAG	CGTCAGAAAA	ATGTCCTTGT	360
ATGCCATTTT	CTCCATTTTA	TTGACATTTT	GCCCCGACTTT	TGTCTTTGTT	TCAGGGAAAT	420
CGTGAACAC	ATGGTCCAGC	ACTTTAAAC	ACAGATCTTT	GGGGATCGGA	AGCCCGTGTT	480
TGACGGCAGG	GTCAACGGCC	TCTTTGNCCC	TCGAGACA			518

## (2) INFORMATION FOR SEQ ID NO:72:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

AAACCAAAAC TCATGTTGCT TGNCCCCCA TCGTCGTCTC AAGTGNGGGC GANNACTTTC      60
CTGGTTGGAG CCCTCCGTCC NAACNNCTAA CACAATGTTT TTTCNCAAAC GTTCTACNAA      120
CGCCTGCGAC NAGNCCAGGG AGGGGGTGCT GTGNATCCTC AGCNACGACA CGCTGCAGTA      180
CTGCGACTTC TTGGGCTCCG GGGCGGCCAT CTGGGTCACC ATNCTGTGNA TGGCACGGCT      240
CAAGACAGTC CTGAAATACG TGCTGTTTCT TCTGGGTACA CTGGTCATCT CCATGTCCTT      300
GCAGCTGGAC CGCAGGGGCA TGTGGAACAT NCTGGGGCCC TCCCTCTTTG CTTTCGTGAT      360
CATGGCTCC ATGTGGGCTT ACCGCTGCGG GCACCGGCGC CAGTGCTACC CCACCTCGTG      420
GCAGCGCTGG GCCTTCTACC TCCTGCCCCG CGTCTCTACG GCCTCTTTGN CCCTCGAGAC      480
A                                                                                   481

```

## (2) INFORMATION FOR SEQ ID NO:73:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```

GACCCTCCAN TAATAANCCT TTTGTTTCCC TCGTCNNTGT TNGTCCGTTT CCCTTTCCTN      60
CCCTTGTTTC NNTNTCCTGC ACCAATATTT CCAANCTAAT ACCCAAGCAA NACAATCCNA      120
ACTCCAAGCT CGGGAATTCT GCCCAAAGAG ACCGTAGGCC GAAACCCACC GGANGGAACC      180
ATCTCACTGT GTGTAAACAT GACTNCCAAG CTGNCCGTGG CTCTCTTGGC AGCCTTCCTG      240
ATTTCTGCAG CTCTGTGTGA AGGTGCAGTT TTNCCAAGGA GTGCTAAAGA ACTTAGATGT      300
CAGTGCATAA AGACATACTC CAAACCTTTC CACCCCAAAT TTATCAAAGA ACTGAGAGTG      360
ATTGAGAGTG GACCACACTG CGCCAACACA GAAATTATTG TAAAGCTTTC TGATGGAAGA      420
GAGCTCTGTC TGGACCCCAA GGAAACTGG GTGCAGAGGG TTGTGGAGAA GTTTNTGAAG      480
AGGGCGTCGA CGGCCTCTTT GGCCCTCGAG ACA                                       513

```

## (2) INFORMATION FOR SEQ ID NO:74:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

CAANTAATAA ANCTTTTGTT TCCCTCGNCA TTGTNNTCGT TCCCCTGTCC NGCCTTGTTT      60
CCNNNGTCCT GCACCAATAT TTCCAAACCN AATACCCAAG CATACAATCC NNACTCCAAG      120
CTNGGAATTC GCCCANAGAG ACCGTCGNGG GAAGAANTTG NCTGGAACT TGTTTCATGGT      180

```

GATATATACC	GT	CCAAG	AAANGGGATG	CTGCTATCAG	TCTTTC	AGCCGGGANA	240
CAGATATTAA	TTATGACCTT	TGTGACTCTA	TTTTTCGCTT	GCCTGGGAGT	TTTGTACCT		300
CCCANCCGAG	GAGCGCTGAT	GACGTGTGCT	GTGGTCCTGT	GGGTGCTGCT	GGGCACCCCT		360
GCAGGCTATG	TTNCTGCCAG	ATTCTATAAG	TCCTTTGGAG	GTGAGAAGTG	GAAAACAAAT		420
GTTTTATTAA	CATCATTTCT	TTGTCCTGGG	ATTGTATTTG	CTGACTTCTT	TATAATGAAT		480
CTGATCCTCT	GGTCAACGGC	CTCTTTGGCC	CTCGAGACA				519

## (2) INFORMATION FOR SEQ ID NO:75:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

CGGGCCCCAA	GACANGCANN	CCNACAAGAT	GTCTTTGTTT	CAAGAAGCTG	ATNGAGGGGT	60
ATCTCGGAAG	CACACGGAAA	CTTTTTCCTT	CCTTCAATTC	NACGCACACT	AACTCTCTAA	120
TGAGCAANCG	GTATACGGCC	TTCTTCCAG	TTACTTGNAT	GTGAAATAAA	AAAAAGTTTG	180
CTGTCTTGCT	ATCAAGTATA	AATAGACCTN	CAATTATTAA	TCTTTTGTTC	CCTCGTCATT	240
GTTCTCGTTC	CCTTTCTTCC	TTGTTTCTTT	TTCTGCACAA	TATNTCAAGC	TATACCAAGC	300
ATACAATCAA	CTCCAAGCTC	GGAATTCGGC	CNAAGAGGCC	GTCCGACGTT	CGTTATCGGA	360
ATTAACCAGA	CAAATCGCTC	CACCAACTAA	GAGCGNCCAT	GCACCACCAC	CCACGGAATC	420
GAGAAAGAGC	TATCAATCTG	TTGAAGAACA	TGCCCCGGCTT	CTTGGTCATC	ATCATGGTGT	480
ACACGNCCTC	TTGNCCCTC	GAGACA				506

## (2) INFORMATION FOR SEQ ID NO:76:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

TTCTTTGTTT	CCTTTTTCCT	NCCCCAATAT	TTCCAAGCTA	ATACCCAAGC	AATACAATCC	60
NACTCCAANC	TCGGGAATTC	GGCCACAGA	GACCGNTGAC	CNTGTAAATG	AGTGAGGCAG	120
GAGTCCCNG	GAGGTAGT	GTGTCAATAA	AAATGATTAA	GGATACTAGT	ATAAGAGATC	180
AGGNTCGTCC	TNTAGTGTG	TGTATGGNTA	TCATTTGTTT	TGAGGNTAGT	TTGATTAGTC	240
ATTGTTGGGT	GGTGATTAGT	CGGTTGTTGA	TGAGATATNT	GGAGGTGGGG	ATCAATAGAG	300
GGGGANATAG	AATGATCAGT	ACTCCGNACG	GTAGGCCTAG	GATTGTGGGG	GCAATGAATG	360
AAGCGAACAG	ATTTTCGTTT	ATTTTGGTTC	TCAGGGTTTG	TTATAATTTT	TTATTTTAT	420
GGNCTTTGGT	GAGGGAGGTA	GGTGGTAGTT	TGTGTTTAA	ACAAAAAGTT	GGGTCGACGN	480
CCTCTTTGNC	CCTCGAGACA					500

## (2) INFORMATION FOR SEQ ID NO:77:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 581 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (X) SEQUENCE DESCRIPTION: SEQ ID NO:77:

AACCGGATTC	GGNCCNAAAG	AGACCGGTTG	CCCCAACTT	TCTGCTGAGA	AGGACATTTT	60
GGAGGGGNTT	TGTTGGGCTG	AAAAAAGCT	GTTTCCTGGG	AATNNAACCC	CCNAGANCTT	120
TCTTGAAGAC	NTTGAATTAA	GATTACCAAN	CGATGGGGGA	CACAGGAAGG	TCCACCCCCA	180
NGCTCTGATA	TNTGCCATCA	CAGTTGCTAC	AATCAGCTCT	TTCCAATTTG	GCTACCAACA	240
CTGGGGTCAT	CAATGCTCCT	GAGAAGATCA	TAAAGGAATT	TATCAATAAA	ACTTTGACGG	300
ACAAGGGAAA	TGCCCCACCC	TCTGAGGTGC	TGCTCAGGTC	TCTCTGGTCC	TTGTCTGTGG	360
CCATATNTTC	CGTCGGGGGN	ATGATCGGCT	CCTTTTCCGT	CGGACTCTTC	GTCAACCGCT	420
TTGGCAGGCG	CAATTCAATG	CTGATTGTCA	ACCTGTTGGC	TGTCACTGGT	GGCTGCTTTA	480
TGGGACTGTG	TAAAGTAGCT	AAGTCGGTTG	AAATGCTGAT	CCTGGGTCGC	TTGTTTATTG	540
ACCTCTTCTG	CGGGTCGACG	ACCTCTTTGG	CCCTCGAGAC	A		581

## (2) INFORMATION FOR SEQ ID NO:78:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GTCAACCTGG	GAGGCTCTCC	CCCACCTTCT	TTCAATCTCT	TCTCAAACCTC	TGCATCCTCA	60
GAGGGGCCTT	GCCTGATTGG	CCTTCTTAAA	ATGGATCTGC	CCCACCCAC	TTTGTACTTG	120
CTGTGCCCTC	TGCTTTCAGG	CGTGTCTCA	AACAGGATCT	CAACAAGGCC	TCCCCTGACC	180
ACACTTTAAA	ACTGCATGCC	CTATATATAC	CCCATCTCTC	TTATTTTAT	TTGTCTCCCT	240
AATGCTTATC	CCCAGTATAC	TCTGTTTATT	GTCTGTCTCT	CCTCACTACA	AAATAAACTC	300
CCCAAGGCCT	AGAGTTTTTT	CTGTCTTGTC	CCTGCTATAT	ACCAGTGCTT	AGAACAGCGC	360
CCTGCACAGA	ATAGAGGCCC	AATTCAATAT	GGATTGCTA	CCACTACATC	CTATTTGTTT	420
CCTTCCCATC	ACTTTTCGAA	CACTCATCTA	TTCACTCTG	CTGACCTGTT	TCACATCTGG	480
ATCCTGTATA	GCAACGTCGA	CGGCCTCTTT	GGCCCTCGAG	ACA		523

## (2) INFORMATION FOR SEQ ID NO:79:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GTNGACTGAT	ACTCGAGTAC	CTGGATCAGC	GGCTGAAAGC	TGCAGAGAAC	AAGTTTGCCA	60
AGTGCCTCAT	GACCTGTCTC	AAATGCTGCT	TCTGGTGCCT	GGAGAAGTTC	ATCAAATTCC	120
TTAATAGGAA	TGCCTACATC	ATGATTGCCA	TCTACGGCAC	CAATTTCTGC	ACCTCGGCCA	180
GGAATGCCTT	CTTCCTGCTC	ATGAGAAAACA	TCATCAGAGT	GGCTGTCTCG	GATAAAGTTA	240
CTGACTTCCT	CTTCCTGTTG	GGCAAACCTC	TGATCGTTGG	TAGTGTGGGG	ATCCTGGCTT	300
TCTTCTTCTT	CACCCACCGT	ATCAGGATCG	TGCAGGATAC	AGCACCACCC	CTCAATTATT	360
ACTGGGTTC	TATACTGACG	GTGATCGTTG	GCTCCTACTT	GATTGCGTCG	ACGGCCTCTT	420
TGGCCCTCGA	GACA					434

## (2) INFORMATION FOR SEQ ID NO:80:

## (i) SEQUENCE CHARACTERISTICS:



(A) LENGTH: 573 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```
GAGGCCCTC AANTCTGCC ATTTTATTTT ATTTTGTGA NCTGGAGTNT TGCTCTGTAT    60
CCCAGGCTGG AGTGCAGTGG CGCAATCTCG GCTCACTGCA AGNTCCTCCT CCCGGGTTC    120
CGCACATTCT CCTGCTTCAG CCTCCCTAGT AGCTGGGACT ACAGGAGCCC GCCACCACGN    180
CTTGTTAATT TTTTGTGTAT TTTTAGTAGA GACAGGNTTT CACTNTNTTA GTCAGGATGG    240
TCTCATNTTT CTGANGTCAT GATCCGCCCA CCTCGGCCTC CCAAAGTGCT GGGAKTACAG    300
GMGCGARCCA CCGCGCCCGG CCTATTTTGT GGKGGTTTNA WWTCTGGGTG ACTTGTGAGC    360
AGGAAGTTTT TGTTKTTTTT TTTCCANTGA AAAGATCTGG CCANAATAGT GGGNNTGTCA    420
AAGTATCTCT TTGCAGNTTT AATTGTGATT TTCCANTGA CTAAGATGAT GTTGTGCAAT    480
TTTTTCAGAN ACTGNTGCT ATCTGTATAT CATCTCTTTT TTTTITTTTC TTTTGGAAAGT    540
GGATCCGGTN CGNCCCTCTT GCCCTCGAG ACA                                573
```

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 468 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```
GAANCCCCAT CCACTTCNCG GGAGGGGGGA GAGCGCGGNG ACGGGTCTCG CTCCCTCGGC    60
CCCGGGATTG GCGGGGTGCA GNTGCCGGAT CCTTCAGCGT CTGNATCTCG GCGTCGCCCC    120
GCGTACCGTC GCCCGGCTCT CCGCCGCTCT CCCGGGGGTT CGGGGCACTT GGGTCCCACA    180
GTCTGGTCTT GCTTCACCTT CCCCTGACCT GAGTAGTCRC CATGGCACAG GTTCTCAGAG    240
GCACTGTGAC TGAATTCCTT GGATTTGATG AGCGGGCTGA TGCAGAAACT CTTCGGAAGG    300
CTATGAAAGG CTTGGGCACA GATGAGGAGA GCATCCTGAC TCTGTTGACA TCCCGAAGTA    360
ATGCTCAGCG CCAGGAAATC TCTGCAGCTT TTAAGACTCT GTTTGKCAGG GATCTTCTGG    420
ATGACCTGCG GAAGTGGATC CGGTTGCGCC TCTTTGCCCC TCGAGACA                468
```

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```
GAACCGGATC CACTTCCGGG AAAACCTCGG ATTAGCAAGC AATAAAAACA TGACCTCACT    60
CTTCCTCAAA GGAGCCCTCG GTCTTCCTCG TGTGACTCAG TTCTTTCCAT CTGTTGTGCC    120
CGCTGCAAGC CTCTTTCTGC GCTGACTGTG ACATCGGAAC GTGGCCTTCC TGTCAACCCC    180
TCGTTGCCAC GCACTGAAGG CCACCCCCCC CCACCTGGGA AACTAAGAAC TGGATATTTT    240
GCCTCATTCA CTTGTACTGT AACAATGTAT ATAATTTGGT TGGTATTTC AATTATTAAT    300
TTTAAGAAGC CTATTTTACT AGTGTTTTAT ATGAACAAAG TACTGCAGAA GTTAAACCTG    360
```

TGTTGT      TTTCTGAGAT GTTTTGCTTT AAGAGATACT TTTGCTCAG TTTTATATG      420  
 CCAGGAAGTG GATCCGGTTC GGCCTCTTTG GCCCTCGAGA CA      462

## (2) INFORMATION FOR SEQ ID NO:83:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GGCCCGATNC ACTTCCGTGG NAAGAGCCTG CAATCCCNCC TACTCAGGAG GCTGAGGCAG      60  
 GAGAATCGCC CGAACCCGAA AGGTGGAGGT TGCAGTGAGC TGAGAATGTG CCACCGCACT      120  
 CCAGCCTGGG TGACAGGGCG AGACTCTCTC AAAGTAAATA AATTAAAAAA ATTTAANAAG      180  
 ATCATCAAAG AACAAACGAA ATTTTGTTAT TTCAGTAAAGT CAATTTAAAC AATAGAAGCC      240  
 AATTCTACCA CCAGAGGARC RMMATAAAAT CTCATTATTA ATTGAGGGTG GCTTCTCTMC      300  
 CAGGTGRRAA ATTCTATAGR CAGGTATTTT GKTTACTACT GACAGGTAAT AAGATTGTTT      360  
 CTWAGGTAAA GGTAAACCCA GCAACACAAC ATTCTTCACT TTTGTTTAAAT GAACCTCNAN      420  
 ATTATCATA TTACTIONTAT TTGCTAGCAT GCTTTTGTG GAAGTGGATC CGGTTCGGCC      480  
 TCTTTGGCCC TCGAGACA      498

## (2) INFORMATION FOR SEQ ID NO:84:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

CGASCCGGAT CCACTTCCCC CTTACGTATC ATTTGTCACA CAGGCCTCAG CCTGAAAAAA      60  
 AATTCCAGTT TTTGTGTATT GCAGTCCCCG TATGCTATTG TCAACCAACA GTTCCCGTGA      120  
 TCCTTGTAAGT CTAATGAGTT TGGATGCATC TATGTTCTTA CTGGATCCAC TGTCCCGTCT      180  
 CGGCAGCTCT TCCTCACTGC TGCTACTCTT TTCTGGACAC TCCTTTTTTT CCATTTGTCA      240  
 AATGTGGTAT TTATGTCTTT ACTGTATCTT TTTTACCCAT GTGAGTTTCA GGAGCCCCAG      300  
 GGTGCAGGAA GGAGGAGCGG AGGCTTGTG CTTGGACACT GCCAGGCTGC TCTGTGTCT      360  
 GTTCTCTTGG GRAAGTGGAT CCGGTTCCGC CTCTTTGGCC CTCGAGACA      409

## (2) INFORMATION FOR SEQ ID NO:85:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAACCGGATC CACTTCCGAA GAGAAGGTCA GAGCGCACTG CAGGCAGCGC GGCTCTGGGA      60  
 AGAACTTCAC GGAGCCCCCTT CTTAGAGCAG GGAGGGGGCT TTCTCAGTGA AATGTTTGGT      120

```

TTTCTGCTGC TCTGCC CCAGGCCCCC CTCCAGGGTA CTGCC CAGATAGGTC 180
AGTGCAACAG GGACCCGGCC GCCAGCACCG CCGACCCCTC CCAGAGTGAC GCCCTTGTTT 240
ACTGACAAAG AGACCTGTCC CAGGAGTGTC CTCCACCGAG CCGGTCAGCT GTGGGTGGTT 300
TTCCTGTTAC GACGCTCAGT AGCCTGTAGC AATAACAAAC TCGTGGCTAT GAATGCAGAT 360
GCAGTGTTCT CATAGAATAA CTGTTCTGTC ACTTTTACAG ACAAAATCTAC GACAAAAAAA 420
AAGATCAACT TTTTTTTTCC GAACAACAAA AAAAATGAAT GATTACAATA GGAAAGGGAA 480
AAATTAAATA GCTACATATC ATTAACAAAT TAATGTTCTT CAAAAAATAC CTACAAATTT 540
CTCTGTACAT TCTTTACGCA CAGCGTAACG ATGGAAGTGG ATCCGGTTCG GCCTCTTTGG 600
CCCTCGAGAC A 611

```

## (2) INFORMATION FOR SEQ ID NO:86:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

```

GAACCGGATN CACTTCCCCT CCACGTAGTT GGNAGGGGAA CCAGCCAACC CGGCCATAGA 60
TCTCCCCTCG CCACCAGCCT TGGTGTCCTT TCTTGTTAAG GATCTTGATG ATGTCACCCT 120
CCTTGAGCGA CAGCTCTGAT CGGTCTCGGG CGCAGAAGTC ATAGCGGGCT TTGGGTGTGC 180
CAAAATACTT TGTGCTTCCC ACTGNTGGNC TGCTGATGGT TCTCTTTTCA NGCTCCTTGA 240
AGGGGAACTG CAANGTGGTG TCCAGAGACT TGAAGCAATC CNTTAGAGAG TTCTGNTGGT 300
AAAATCCAC CAGNTCCGTA AGCCCCNGA AAGNCTTTT CTCTGTGATC CGGTACAGAA 360
CCTTCTTCTG TCA 373

```

## (2) INFORMATION FOR SEQ ID NO:87:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 489 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GTTGACCGCC CACGATGATC TTGCCGCCAC GCTTGCTGGT CTTCTCCACT GACAAGGCAG 60
TGCTCAGGCC CTGCTCATGC TTCCCAGAC CCTGGCCCTC CCGGAAGCCG NACTTCTGCA 120
TGATCTTGTC CGCCACCGTG CCCCCATGT TAGCGAGGAA GGAGTTGCTA GGTCCGGTTG 180
GAGATCTCGG TCTGTCTTGT TCCTCGTACA CTGGGGGAGG AATGGCTGCT TTGGAAGACT 240
GTGATCGAGG TCTTGAGTCC TCTTCATAAG GAAATCTCG GGGTAACTCT TTGTCTTTCT 300
CTACCAGAGA AGTGGGTGGG GCAATGGCAG CTCCGCCCAT ACTTCTCTTC CTCCTCTCTC 360
GCTCATAATC TTCATCTTCA TCAGAACTG GATCTGGTCT CCTTGCAAAC CCACTTGCTT 420
CATGTCTGTC TTTACGCCTT TTTTCCCTT CTCTATTTC CGTCGACGGC CTCCTTGGCC 480
CTCGAGACA 489

```

## (2) INFORMATION FOR SEQ ID NO:88:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

GACGACTTTG	TGGGTATTAA	TTTTTGTTTA	AGTTTAAAT	AAAAGTAAAG	ATTCATTTTG	60
GATATCAGTT	GAAACCCCTT	AGTAACTCAG	TTTCTGTTAT	TCTTGTTCTC	ATTCCTTTA	120
AATACACTTG	TTCTTGGCTT	TTGCCATTTT	GATTCTGTGA	AGTAGGCAGG	AGCAGGGATT	180
AATTTATACA	GTATTCCTGT	TCTGAACAAA	ACCAGAAAAG	TCACTGTATA	AACCTGACTT	240
AAAATAGTAT	CTTTCTCTTY	TCATGTATTT	TCATTTGGGG	GAAAAAAAT	CTCTTTAATT	300
GTAACCTGAA	TTCAAGCTGT	ACCCCTCCAT	GGTCCTACAC	TCTAGAGCTA	ATCTGGTTGG	360
GCAGAAAGGC	AGAAGGATGG	TATATTGTCC	CATTGTGCCT	ATAATGTATT	TTAAATGGGT	420
CATTCCACCT	TACCTAATGG	AAATTCTTGC	AGCTTTCCTA	GTGCTCATCA	GCGGTTTTAG	480
GAATTCATA	ACGTCGACGG	CCTCTTTGGC	CCTCGAGACA			520

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

GTTGACGGCG	TGGTGGCGGG	TGCCTGTAAT	TCCAGCTACT	CAGGAGGCTG	AGGAAGGAGA	60
ATCATTTGAA	CCTGGGAAGT	GGGGGTTGCA	GTGAGCCAAA	ATCGTGCCAT	TGCACTCCAG	120
CCTGGGCAAC	AAGAGTGAAA	CTCCATCTCA	GAAAAAATAA	AAAAAATAA	AAAAAATAA	180
GAAGGAACCG	GTGGGGCAAG	CAGAGTTAAG	ATGCTTTGCT	AAGTTAAAAA	GTCTACTAAC	240
TACCAAATCT	TGCTGTGGYT	TATCCAGAGC	TCTCAAAATG	CTGCCAATCT	ATTTTAAAGA	300
AGACCTAAAT	CCTCATTTTG	GCTTTTAGGA	CACTAGGATT	TGCCTTCAAC	CCATGTCTCC	360
AGTCATATAT	TTTCTTACTA	TTCTTCAAAC	ATACCTTTTT	CTCTTTTCTT	CACTCTTCAT	420
TATGCTGTTT	AAATCGTCGA	CGGCCTCTTT	GGCCCTCGAG	ACA		463

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GTACAAGAAG	TGGTCCATTC	CTTTGTCTGA	AGGAGCGACA	GGAGCATCTA	CGGTTGAGAA	60
GACAGAAAGT	TTGGCTTCGT	CGATGTCTTG	CTGTGTGAAT	TTTCCAGACT	TAGCCCAGTC	120
GACAGCCTTC	CCAAAAGACT	GGAGCGTCTC	TATTGTATTT	GGGTCCCTGT	AAGAGTAAAC	180
GGTGAAAATC	CCATTGTGGC	TGAGTTTTCG	GCCTCCACCA	TAAGCACCGC	CTTTTCTCG	240
AATTTCTGTA	TGCAAGAATT	TGGCAGTCAT	CAAACGTGCA	AGGATTTTAA	GACTGGCATG	300
ATCTGGGTCC	GTGTAGGGGA	CAGTTCGGAT	GCATTCACCC	ACGTTATTCA	CCGGGAAGGG	360
CATCAGGAAG	TGAGTCTTCA	TCTGCCAGGG	CTTGAAGGTG	GGTTCCATGA	CCAGCTTCCT	420
AATGACCTGG	GAGCCATGGG	GAACGTGGGC	ATCTCCACCA	GAGCTGCTGG	GCACAGGTTT	480
CTCGACCGTG	TGTGGGCGCA	CAGGCCGTGC	ACGGCCTCTT	TGGCCCTCGA	GACA	534

(2) INFORMATION FOR SEQ ID NO:91:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

```

GTCGACCAGG ACTAGATTCT GTCTCTCCAA AGTGGCCCAA GCCCTGTTCT CTGTACTAGG      60
GAAGCCAGCT GTGTCTTTTC GAGGACAGTT GGTCCAGCCA GCAGGCTCAG TTCAGATACC      120
AGACAACCAT TCCAGCACGA GGGCTCAGCG CCCTGGCCCC GCGGGTCGCT CCAGTGCCTG      180
TGTGCCCACC AGCACATCCA TGAGGTAGTC CAATTCGGCC TCGTCCAGCT CCGGAGCTTC      240
CTCCTTGGCC GGCCCATCCT CAGGGCCTGG TTTGAGGCC TCAGAGGCTG GTGCCCAAAG      300
TTCATTGTCA TACATAGAGG TGTCATATC CTCAAACAGG CCCTCAAGCC CATCGTCCAG      360
TAGACAGCCA GTGGCTGGGC CCAGCAGGTC CAAGGCACCC AGGCTGGGCG CTGCTCCCCC      420
GATGTACGG CCTCTTGGC CTCGAGACA                                         450

```

## (2) INFORMATION FOR SEQ ID NO:92:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

```

GTCGACGGCG GYCATGGCAA AGCAGTACGA CTCGGTGGAG TGCCCCTTTT TTGTGATGAA      60
GTYTCCCAAA ATACGAAGAA GCTCGCCAAG ATCGGCCAAG GCACCTTCGG GGAGGTGTTC      120
AAGGCCAGGC ACCGCAAGAC CGGCCAGAAG GTGGCTCTGA AGAAGGTGCT GATGGAAGAAC      180
GAGAAGGAGG GGTTCCTCAT TACASCCTTG CGGGAGATCA GGATCCTTCA GCTTCTAAAA      240
CACGAGAATG TGGTCAACTT GATTGAGATT TGTGGAAC AAAGCTTCCC CTTTATAACC      300
GCTGCAAGGG TAGTATWTTA CCTGGTGTTC GACTTCTGCG AGCATGACCT TGCTGGGCTG      360
TTGAGCAATG TTTTGGTCAA GTTACGCTG TCTGAGATNC AAGAGGGTGA TGCAGATGCT      420
GCTTAACGGC CTCTTTGGCC CTCGAGACA                                         449

```

## (2) INFORMATION FOR SEQ ID NO:93:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```

GTCGACAAAA CATGGAGTTG TTCCTTTGGC CACATATATG CGAATCTATA AGAAAGGTGA      60
TATTGTAGAC ATCAAGGGAA TGGGTACTGT TCAAAAAGGA ATGCCCCACA AGTGTTACCA      120
TGGCAAACT GGAAGAGTCT ACAATGTTAC CCAGCATGCT GTTGGCATTG TTGTAAACAA      180
ACAAGTTAAG GGCAAGATTC TTGCCAAGAG AATTAATGTG CGTATTGAGC ACATTAAGCA      240
CTCTAAGAGC CGAGATAGCT TCCTGAAACG TGTGAAGGAA AATGATCAGA AAAAGAAAGA      300
AGCCAAAGAG AAAGGTACCT GGGTTCAACT AAAGCGCCAG CCTGCTCCAC CCAGAGAAGC      360
ACACTTTGTG AGAACCAATG GGAAGGAGCC TGAGCTGCTG GAACCTATTC CCTATGAATT      420

```

CATGGCAGG TAGGTGTTAA AAAAAAAAAA TAAAGGACCT CTGGGTCAA CGGCCTCTTT 480  
GGCCCTCGAG ACA 493

## (2) INFORMATION FOR SEQ ID NO:94:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 437 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GTCGACGAGG GGGTCATGGY AGGCAGGGGC AGGTGCGTCA GAGATGGAGC GCAGGTCCTG 60  
 CATGGAGAAG CTCCGCGAGC TGCCGGCCAG CGCCCCCTGA CTCTTGGTGG CAGCCTGCAC 120  
 AGCAGCGGAG GCGGCAATGT TGAGGCCCCG CTCCCGAAG CTGAGCACGG TCTCGTAGCT 180  
 GCGCTCCTTG GCCTGCACGA TGTACGCGTC GATCTCCTTC TCATGGCGGG ACAGGGACGG 240  
 GTGGACAAAC TTGCGGTAAA GCAGGCTGGC GCCCTTGGTG TAGGGTGAGA GCAGCCACAG 300  
 CACGAAGGCC ATCTTGATCT CATAGTAGAA AGGGAACCAG GAGATAAAAA TGTCTGTAAC 360  
 GATCTCTGCT GCCATGAAGA GTGCARCAA CTATCCAGTA CATCATCCAG TGGACGGCCT 420  
 CTTTGGCCCT CGAGACA 437

## (2) INFORMATION FOR SEQ ID NO:95:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 493 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GTCNACCGCC CTTCTTGTCT CCTCCTCAGT NGTACACCTG TGTGGTCTCC ACCACCTCAG 60  
 ACTTNTCTCG CCCCTTTCAG TNGGAAGAAG GNGCAGGCCG GTCTCGGGT CCTCCACGCA 120  
 CCGNTCCAGA AGTTGCCTGT ACGTGAGGTT CTCATGCGTG TTGGGGTNAA AGAAGCCCTT 180  
 GGTGTCGTCTG CTGGGGTCCG CCGGGACGCG GKTCATCTCC TCACTGAAGT AGCCCCGCTG 240  
 GTAGRSCAG TCCACAGACA CGCGGTGGTT GTGYACGGGG TCGATGATRC CGCCCCGTGGC 300  
 GATCTGGGCC TCCAGNAGGN GGATNCCGTG CTGCNGGAGA ACCAGNCCCT TCTNNATGTC 360  
 CTGGAAGAGN GAGATGGTCC CCCCCAGTA GGGGTCTCTG TANCCGGTGA CGNCCTTCTC 420  
 GACAGACAGC ATCTGCTCGT GAAGCTCGGG GCCCACCAG CCCGCCTTCA CGGCCTCTTT 480  
 GGCCCTCGAG ACA 493

## (2) INFORMATION FOR SEQ ID NO:96:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GTTGACCCAC GTTAGTACGG TTGGATAGGA TATGCTCTCA TGGTAACGCG TCCAAGTTGG 60

```

AATGGTCTTC CTTCTCCAT GGNATCCACA TGCTACTGGC GTTAGCTCA GATCTTGAGG 120
AAGNTATCCC AGGACCCTGT CGCCACAGGC ATGNCATCGT CANTCACGCC CAGGCAGCTG 180
ACGCGGTTGT CATGNCCAGN CAAGACAAC TCCCGGTCGG GTTTGNGTGC ATCCCAGACG 240
TTGCAGTTGA AGTCGTCGTA CCCAGCAAGG AGGAGSGSGC CGCTCTTGGW GAAGGAGACA 300
GAGKTGATCC CCCAGATGAT GTTGTCAATG GAGTAAAGTCA TGAGCTCCYG GTCAGCACGA 360
AGGTCAAACA GCCTGCNGGT GCGTCGTCT GAGCCAGTGC CAAATGCATT GCCATTGGA 420
AAGAANCAAA TGNCAATGAT GTCAGACTCG TGCCCAAGTGA AGGTCTNCCG GCACATGCCT 480
TCTCGCACAT CCCAGAGTTT GTCTGAAGCA TCACAAGCAC CAGAGACGAA CAGTCTGGTG 540
TCAGTCGACG GCCTCTTTGG CCCTCGAGAC A 571

```

## (2) INFORMATION FOR SEQ ID NO:97:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

```

GTCGACGTAC CACCAGCAAC CATCAATCCC GTCTCCTCCT GCCTCCTCTC CTGCAATCCA 60
CCCCGCCACG ACTATCGCCA TGGCAGCCCT GATCGCAGAG AACTTCCGCT TCCTGTCACT 120
TTTCTTCAAG AGCAAGGATG TGATGATTTT CAACGGCCTG GTGGCACTGG GCACGGTGGG 180
CAGCCAGGAG CTGTTCTCTG TGGTGGCCTT CCACTGCCCC TGCTCGCCGG CCCGGAAC TA 240
CCTGTACGGG CTGGCGGCCA TCGGCGTGCC CGCCCTGGTG CTCTTCATCA TTGGCATCAT 300
CCTCAACAAC CACACCTGGA ACCTCGTGGC CGAGTGCCAG CACCGGAGGA CCAAGAACTG 360
CTCCGCCGCC CCCACCTTCC TCCTTCTAAG CTCCATCCTG GGACGTGCGG CTGTGGCCCC 420
TGTCACCTGG TCTGTCTCTT CCCTGCTGCG TGGTGAGGCT TATGTCTGTG CTCTCAGTGA 480
GTTCTGTGGC CTTTCTCTAC TCACGGCCTC TTTGGCCCTC GAGACA 526

```

## (2) INFORMATION FOR SEQ ID NO:98:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

```

GTTGACTTTG TGGGTATTAA TTTTGTTTA AGTTTAAAT AAAAGTAAAG ATTCATTTG 60
GATATCAGTT GAAACCCCTT AGTAACTCAG TTTCTGTTAT TCTTGTTC TCCTCCTTTA 120
AATACACTTG TTCTTGGCTT TTGCCATTTT GATTCTGTGA AGTAGGCAGG AGCAGGGATT 180
AATTTATACA GTATTCCTGT TCTGAACAAA ACCAGAAAAG TCACTGTATA AACTTGACTT 240
AAAATAGTAT CTTTCTCTTT TCATGTATTT TCATTTGGGG GAAAAAAAT CTCTTTAATT 300
GTAACCTGAA TTCAAGCTGT ACCCTCCAT GGTCTACAC TCTAGAGCTA ATCTGGTTGG 360
GCAGAAAGGC AGAAGGATGG TATATTGTCC CATTGTGCCT ATAATGTATT TTAATTTGGT 420
CATTCCACCT TACCTAATGG AAATTCCTGC AGCTTTCCTA GTGCTCATCA GCGGTTT TAG 480
GAATTCACTA ACGTCGACGG CCTCTTTGGC CCTCGAGACA 520

```

## (2) INFORMATION FOR SEQ ID NO:99:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC	AAAGAGGCCG	TTGACGGGGC	TGGAGGAGGA	AGAAGAGGTG	GATCCCCGGA	60
TCCAGGGAGA	ACTGGAGAAG	TTAAATCAGT	CCACGGATGA	TATCAACAGA	CGGGAGACTG	120
AACTTGAGGA	TGCTCGTCAG	AAGTTCCGCT	CTGTTCTGGT	TGAAGCAACG	GTGAAACTGG	180
ATGAACTGGT	GAAGAAAATT	GGCAAAGCTG	TGGAAGACTC	CAAGCCCTAC	TGGGATGCAC	240
GGAGGGTGGC	GAGGCAGGCT	CAGCTGGAAG	CTCAGAAAGC	CACGCAGGAC	CTCCAGAGGG	300
CCACAGAGGT	GCTCCGCGCC	GCCAAGGAGA	CCATCTCCCT	GGCCGAGCAG	CGGCTGCTGG	360
AGGATGACAA	GCGGCAGTTC	GACTCCGCCT	GGCAGGAGAT	GCTGAATCTC	GCCACTCAGA	420
GGGTATGGA	GGCGGAGCAG	ACCAAGACCA	GGAGCGAGCT	GGTGCATAAG	GAGGTCGACG	480
GCCTCTTTGG	CCCTCGAGAC	A				501

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

GTCGACCGTG	TCCAGAGCCC	ACCTCCCTCA	CACCCACACA	GCGCTTCCTA	AAGGCAGGGA	60
CAGGAGCTGG	CCTCCCTCGC	CTGCTGGCAT	GGGGCTGGAC	ACAGGAGGAA	GTGGCGTGGG	120
GGCTGCCTGA	GGGGAGTGAG	GCGGCAGGAT	AGCTTCCCCA	GCAGGTCTCT	GGCTCAGGTC	180
CAGGTATCTC	CTCCTCCCCA	TACCTCTGCC	TCTCGCCTCC	GCTCAGAAAA	GCAGGTGCCC	240
TTAAGAGCCA	TCTCCACCCC	CATGTAAACT	GCACACAGGA	AGGGAGAGGC	CAGTCCGACT	300
GCTCTGAGGT	CCAGGTAGGA	TGGTTTCCCC	CAGTGTCTGG	GTGGGGAGCA	AGGAACTCCA	360
GGGGCGACCT	TGTGCCACCG	CATCACCTTC	CTGCTCAGGG	AAGGGGCCCC	TGCTGCCGCT	420
TGGAGGGTGC	CATGCCCAGA	GCCTCTGCCC	CTAGCCTCAG	CCTCGCCTAC	TCACTGGGGG	480
CTCCAGCACC	CCCGGCCGTC	AACGGCCTCT	TTGGCCCTCG	AGACA		525

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

GTCGACGCGA	GTGGAGACCT	GTGGTAGAGA	AGCTCCTTTT	GATGTCCTAC	AGGCTTTCCA	60
CTGTGGTGTC	TCCAGTCATT	CAGAGCTCAT	CCCCTGAAGG	CCTCATCCCA	ATGGACACTG	120
ATTGAGAGTC	AGCAASCCGC	TTACAGATGA	TTCTGAATGA	GATTCANCTT	CGAGATACTA	180
ATGATTATTT	TAACCAAGCC	AAAATATTGA	AAGAACATGA	TAGCTTTGAT	ATGAAGGACT	240
TGAATGCTAG	TGTGGTGAAT	ATTGATACTT	CTACAGAAAT	CAAAGGTAAA	GAAGTAAAAA	300
CATGTGATGT	AACTGCGCAG	ATGGTGCTGG	TATGTTGTTG	GAGAAGTATG	AAGGAAGTTG	360
CTTTACTTTT	AGGCATGTTG	TGCCAGCTTC	TGCCCATGTC	AACGGCCTCT	TTGGCCCTCG	420
AGACA						425



## (2) INFORMATION FOR SEQ ID NO:102:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GGGACGTAAT CAACCCAAGC TTATGACCCG CACTTACTGG GAANTCNTCG TTCATGGGGA      60
AGAANTGCAA TCCCCGATCC GCCATCACGA ATGGGGGGCA CCGGGTTANC CGCGCCTCCC      120
GGCGTAGGGT AGNCACACNC TGANNCAGTC AGTGTATCGC GCGTGCATCN CCGGACATCT      180
AAGGGCATCA CAGACCTGTT NTTGNTCAAT CTCGGGTGGN TGNNCGCCAC TTGTCNCTCT      240
AAGAANATGG GGGACGCCGC CCNCTCGGGG GTNCGGTAAC TAGNTAGNAT NCCAGAGTCT      300
CGTTTCGTTAT CGGAAGTAAC CAGACANATC GTCCCCCAN CTAAGANNNG CCATNCACCA      360
CCACCCACGG AATCGAGANA GAGCTATCAA TCTGTTGTTA GGACATGCCC GGCTTGCTTG      420
GTCATCATCT TGGTGACNC GACCTCTTTG NCCCTCGAGA CA                          462

```

## (2) INFORMATION FOR SEQ ID NO:103:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GTCGACAGAA ATCATTATTC TTTATTGCA GNCATTCCAC CCCACCTATG TTTCTTCTC      60
CTTCCTTCTT CTCTGTCAGG AGAGTTCTTG TCATGCTGAG CTTCTTCATT GTATGGCATT      120
TATATTTTAG CACTGTTTTA TTATTGCCTT CTGTATCAGC ATGTTCAACA TTTCTTCAA      180
ATATAACACA GGTCCCTAGA GTGTCTTCAT ACTCCCCAGC AAAGACACAG CTGTCCACTT      240
GCAGAATGGG CCTCTCAGTG TCAATGCCCA AAACCTTGCA TTTATTTTCA CATTTTGAGA      300
GGAAGTCTGA ATCAATAATT CCTGATAATT CCACCAGAAC CAACTGCTCC TCCTCTTCCT      360
CGTCTTCTCC GTCCTCTGGA CTCGCTCGT CCGCCGCCGC CGCCATGGTC CCGCGGCGGT      420
TGACGGCCTC TTTGGCCCTC GAGACA                          446

```

## (2) INFORMATION FOR SEQ ID NO:104:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GANTTCCAGT GAAGTTGCCT TTTTGCCNCC CCTAGNCATC CAACCTNTCN AAAACCAAGT      60
ANACNAGGCT GATTCTGGAA GTTCTTGAGG AAAAAGCAAG CTTTACAACC AAAATACCCA      120
GATGCTGTGN CCACATGGCT AAACCTTGA CCCATCTCAG AAGCAGAATC TCCTANCCCC      180
ACAGAGTGCT GTGTCCTCTG AAGAAACCAA TGACTTTAAA CAAGAGACCC TNCCAAGTAA      240
GTCCANCGAA AGCCATGACC ACATGGATGA TATGGATGAT GAAGATGATG ATGACCATGT      300

```

GGACAGC	ACTCCATTG	ACTCGANCGA	CTCTGATGAT	GAGACGACA	CTGATGATTG	360
TCACCACTCT	GATGAGTCTC	ACCATTCTGA	TGAATCTGAT	GAACCGGTCA	CTGATTTTCC	420
CACGGACCTG	CCANCAACGT	CGACGNCCTC	TTTGNCCCTC	GAGACA		466

## (2) INFORMATION FOR SEQ ID NO:105:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

GTCGACAGCG	ACCGCTCCTC	CCTTCCTTCC	TTGAATCAGA	GCACGGTAGA	AAGCTGCTGC	60
TCTATGCCGA	AGTGTTCGGA	AATTCTTGGC	AGCTGCATAG	ACCGCGGGGC	TGTCCCCTAA	120
CCTTTGCTCT	TGTCGCCTCC	TCCACCAGGA	GGGCCCCCCT	CCCTGTACCC	CAGCTTCCCA	180
CAGAGCTGCA	GGCACAGCTT	GGCTGCCTCC	CGCTTCCAGA	CCCCTATCTC	CATCAGGTGG	240
GCCTGAGGCG	GGGCTGACTC	TTTCTTTAGG	CCCCTCACAG	GGACTAGAGC	AGAATGGCAC	300
TCAGTAAGCA	GGGGTGACAA	CTAGAGGAAT	GGCAGGGTGT	GTTCAGCTGG	GAGAACAGTT	360
ACCAGAGACG	CTGTGATTCT	TCAGGTGTGA	GGGCAACTGT	TACAAGACTT	AAGTAGCAAC	420
AACAACCATG	GTAGACGCTG	CCTTCGATTG	TGCCCTTGGG	AGTCCCAGGC	CTGGCACCAG	480
GCCCTACTCA	TCCTTCATT	CTTTTTCTTT	TCTTTTGT	TTTGT	TTTTTTT	540
GTCAACGGCC	TCTTTGGCCC	TCGAGACA				568

## (2) INFORMATION FOR SEQ ID NO:106:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GATTCANTTT	GGATATCAAG	TGNCNCCCC	CNTAGTAACT	CAGTTTCTGT	TATTCTTGTT	60
CTCANCTTCC	CNATAAAAAC	ACTTGTTTCGT	GGCTNTTGCC	ANNTTGATTG	TGTGAAGTAG	120
GCAGGAGCAG	GGATTAATTN	ATANAGTATT	CCTGTTCTGA	NCGCAACCAG	AAAAGTCACT	180
GTATAAACTT	GACTTAAAAT	AGTATCTNTC	TCTTTTCATG	TATANTCAGG	TGGGGGGGNA	240
AAAATCTCTT	TAATTGTAAC	CTGAANTCAA	GCTGTACCCC	NCCATGGTCC	TACACTCTAG	300
AGCTAATCTG	GNTGGGCAGA	AAGGCAGAAG	GATGGTATAT	TGTCCCATTG	TGCCTATAAT	360
GTATNTTAAA	NTGGTCATTC	CACCTTACCT	AATGGAAATT	CTTGCAGCTT	TCCTAGTGCT	420
CATCAGCGGT	TTTAGGAAGT	CACTAACGTC	GACGGCCTCT	TTGGCCCTCG	AGACA	475

## (2) INFORMATION FOR SEQ ID NO:107:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

```

CCTGAGTTGT  AAGGNN CNCAAGACAA GTACCCAAGT TTCCT  TNTTCTCTTT      60
AAGCTTCTCN AGTCATACAT TTNCAAGCGT CCTTTTGTC A ACCATNCCAG TCNANATACA      120
TTATTTGTCC TCCAATGGNT GACTTGCCAG CATCTACGTG NCCAATGAAT ACTACATTTA      180
CATGCTCTTT CTTAGGAGCA CTGGCGGTG CAACCACAGA CTTAGGTNTT GGGATTTCTT      240
CTTCTCTCTC CATCATTTCA TGGGCACTTT TCTCTGGCGG CCTTCCATCT CCCAAGGAAC      300
CACCCCCTGG CTCTGCTTCA CTTATTTCTT CTTTGTGCTC CCATGATTCT TCTGGAGACA      360
TTTCTGTCTC TCCAATTTCT ACAATAGGTT CTGAAAGTTC CATGCTAACA GCTGAATTTG      420
AACCTTCACA CAATGACTGT TCGTCGACGG CCTCTTTGGC CCTCGAGACA      470

```

## (2) INFORMATION FOR SEQ ID NO:108:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

```

GAATTCGGCC AAAGAGGCCT ACTCACAGTC ATCAATTATA GACCCACAA CATGCGCCCT      60
GAAGACAGAA TGTTCCATAT CAGAGCTGTG ATCTTGAGAG CCCTCTCCTT GGCTTTCCTG      120
CTGAGTCTCC GAGGAGCTGG GGCCATCAAG GCGGACCATG TGTCAACTTA TGCCGCGTTT      180
GTACAGACCC ATAGACCAAC AGGGGAGTTT ATGTTTGAAT TTGATGAAGA TGAGCAGTTC      240
TATGTGGATC TGGATAAAAA GGAGACCGTC TGGCATCTGG AGGAGTTTGG CCGAGCCTTT      300
TCCTTTGAGG CTCAGGGCGG GCTGGCTAAC ATTGCTATAT TGAACAACAA CTTGAATACC      360
TTGATCCAGC GTTCCAACCA CACTCAGGCC GTCGAG      396

```

## (2) INFORMATION FOR SEQ ID NO:109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC AAAGAGGCCT ACCCGATTGC TAAATGGATT ATGAAAGCAA ATTGCTACTG      60
GGAGGTGATG GTCAAAAGCA AACTTAGATG GTTTTCACAC CATCTGTCAT CATGACTCAA      120
AGGGAAATGC TAGCCACACC ATTTTCAGT GAAGCCACTG CTTTACACAG TAGATACACA      180
TAGCTTCCTA TTGTTATTTT CTTTCTAAT TATGTACATT TAGAAAAAAA ATACAACACT      240
GTGTTAAACA GCAGGACAGC TAGCAATGGA ACATACAACA CTATGCTGAA AAACCACAAC      300
AGCTTGTTA AGCGGAGGAG AGAAACAGAG ATGGCCTTCA TGGAGTGAAG CTGTCAATGC      360
CTGCCATCTC CTTAGTCTGT GACGGATCTG CACTCTGAGG GCAGGCCTTC TGAGCGCCGC      420
CACTTTGCCA GGCGTGCTT AAACCATTTC TGGGTCTCCT CTCGGAAAG GCCTGCCTCG      480
GCCGCGATGA GGCACAGCGT GGTGGAATCC GGTGCTTGT CGAG      524

```

## (2) INFORMATION FOR SEQ ID NO:110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

( SEQUENCE DESCRIPTION: SEQ ID NO:110:

GAATTCGGCC AAAGAGGCCT ATTTT TTTT TCTTTT TTA GGCATATGTA GTAATATTAG	60
AAACATTTAA TTTGGGAAAC TTTGATTCTT GAAAGAGAAA ACAAAGCAT GTGAATAAAC	120
TTTGAAGTGT TCACCTCAGT TTGGGACCAA ACTGCTTGA TCTTTGTAAA AACCGGTTTT	180
GTATGTCAAG GAGGAGTTA AGGCCTTCC GACCACCTTG TGTCCCTT TCTGCGCAG	240
CCATGTATCA CGTGGAGTTG CTCCTACCA CACCTCACGT GCCCCTGAGC CCTATTTCT	300
GATTTCTTCT GGGCTGGACT TCCCCTTCT CCACCAGCAG CTCCAGTATC CCTGTTGAAT	360
TCTAGACCTG CGTCGAG	377

(2) INFORMATION FOR SEQ ID NO:111:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

GAATTCGGCC AAAGAGGCCT AGCGGACAAG TTTGAGAGAC CTGGCCTTGG CCAAAGCCCT	60
CGATTCGCTG TGTCAGAAAA ACTGAGGTGA GAAGAGACCA CCACCCTCTC CACCACCCTC	120
TCAGTAGGAA AGCGGGATCA ACAGAGATCA GAAGGACAGC ACACTCACAC CTGCACATGA	180
ACACACCATC TATGTCAGGA AATCCAGGGG AAGGGGAAGA GGGGTGGAGT GGCTCCGCAG	240
GGCTGACCTG ACAGGGGACA GGAACACTCC CCTAGACCCA GGAAGTCCG CCCAAATCCA	300
AAGCTCTTGA AAGGAGGTAT GGCCTCGAAA CTCCAGAAGC CTCTTCTGCC AACGCACCGA	360
GGACCTGCAC CTCCATTCA GCACGCGTCG AG	392

(2) INFORMATION FOR SEQ ID NO:112:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

CAATTCGGCC AAAGAGGCCT ACAGCATTC TACTCCTTCC AAGAAGAGCA GCAAAGCTGA	60
AGTAGCAGCA GCAGCACCAG CAGCAACAGC AAAAAACAAA CATGAGTGTG AAGGGCATGG	120
CTATAGCCTT GGCTGTGATA TTGTGTGCTA CAGTTGTTC AGGCTTCCCC ATGTTCAAAA	180
GAGGACGCTG TCTTTGCATA GGCCCTGGGG TAAAAGCAGT GAAAGTGGCA GATATTGAGA	240
AAGCCTCCAT AATGTACCCA AGTAACAACT GTGACAAAAT AGAAGTGATT ATTACCCTGA	300
AAGAAAATAA AGGACAACGA TGCCTAAATC CCAAAGTCCA G	341

(2) INFORMATION FOR SEQ ID NO:113:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 203 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

GAATTCGGCC AAAGAGGCCT AGCAGTAGCA TGTGCAGCAA CCAATCAAGA TGGAGAACTA	60
TACCTGCACT CATTGTGTG TTTGCATGTA TAGTTCTCTG CAGTAGCATG TGCAGCAACC	120
AATCAAGATG GAGAACTGTT CCATCGCAA GCTCCCTCTT GCCACTTCTT TTTAGCCACC	180
CAATCCTCTC TGCTCCCGTC GAG	203

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

GAATTCGGCC AAAGAGGCCT ATGAAGATCA GCTATTAGAA GAGAAAGATC AGTTAAGTCC	60
TTTGGACCTG ATCAGCTTGA TACAAGAACT ACTGATTTC ACTTCTTTGG CTTAATTCTC	120
TCGGAAACGA TGAAATATAC AAGTTATATC TTGGCTTTTC AGCTCTGCAT CGTTTTGGGT	180
TCTCTGGCT GTTACTGCCA GGACCCATAT GTAAAAGAAG CAGAAAACCT TAAGAAATAT	240
TTTAATGCAG GTCATTCAGA TGTAGCGGAT AATGGAATC TTTCTTAGG CATTTTGAAG	300
AATTGGAAG AGGAGAGTGA CAGAAAATA ATGCAGAGCC AAATTGTCTC CTTTACTTC	360
AACTTTTTA AAAACTTTAA AGATGACCAG AGCATCCAAA AGAGTGTGGA GACCATCAAG	420
GAAGACATGA ATGTCAAGTT TTTCAATAGC AACAAAAAGA AACGAGATGA CTTCGAAAAG	480
CTGACTAATT ATTTCGTAAAC TGACTTGAAT GTCCAACGCA AAGCAATACA TGAATCATC	540
CAAGTGATGG CTGAACTGTC GCCAGCAGCT AAAACAGGGG TCGAG	585

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC AAAGAGGCCT ACTGGCGGCC GCGGAGACGC AGAGTCTTGA GCAGCGCGGC	60
AGGCACCATG TTCCTGACTG CGCTCCTCTG GCGCGGCCGC ATTCCCGGCC GTCAGTGGAT	120
CGGAAGCAC CGGCGGCCGC GGTTCGTGTC GTTGCCCGCC AAGCAGAACA TGATCCGCCN	180
CCTGGAGATC GAGGCGGAGA ACCATTACTG GCTGAGCATG CCCTACATGA CCCGGGAGCA	240
GGAGCGCGGC CACGCCCGG TGCGCAGGAG GGAGGCCTTC GAGGCCATAA AGGCGGCCGC	300
CATTCCAAG TTCCCCCGC ATAGATTCAT TGCGGACCAG CTCGACCATC TCAATGTCTGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(x) SEQUENCE DESCRIPTION: SEQ ID NO:116:

GAATTCGGCC	AAAGAGGCCT	AAACAAAATG	GTTATCAACC	ACTTGGAGAA	GTTGTTTGTG	60
ACAAACGATG	CAGCAACTAT	TTTAAGAGAA	CTAGAAGTAC	AGCATCCTGC	TGCAAAAATG	120
ATTGTAATGG	CTTCTCATAT	GCAAGAGCAA	GAAGTTGGAG	ATGGCACAAA	CTTTGTTCTG	180
GTATTTGCTG	GAGCTCTCCT	GGAATTAGCT	GAAGAACTTC	TGAGGATTGG	CCTGTCAGTT	240
TCAGAGGTCA	TAGAAGGTTA	TGAAATAGCC	TGCAGAAAAG	CTCATGAGAT	TCTTCCTAAT	300
TTGGTATGTT	GTTCTGCAAA	AAACCTTCGA	GATATTGATG	AAGTCTCATC	TCTACTTCGT	360
ACCTCCATAA	TGAGTAAACA	ATATGGTAAT	GAAGTATTTT	TGGCCAAGCT	TATTGCTCAG	420
GCATGTCGAG						430

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

GAATTCGGCC	AAAGAGGCCT	AGAAGAAGAT	GATCCTAAAC	AAAGCTCTGA	TGCTGGGGGC	60
CCTCGCCCTG	ACCACCGTGA	TGAGCCCTTG	TGGAGGTGAA	GACATTGTGG	CTGACCACGT	120
TGCCTCTTAC	GGTGTAACCT	TGTACCACTC	TTACGGTCCC	TCTGGCCAGT	TCACCCATGA	180
ATTTGATGGA	GACGAGGAGT	TCTATGTGGA	CCTGGAGAGG	AAGGAGACTG	TCTGGAAGTT	240
GCCTCTGTTC	CACAGACTTA	GATTTGACCC	GCAATTTGCA	CTGACAAACA	TCGCTGTGCT	300
AAAACATAAC	TTGAACATCC	TGATTAAACG	CTCCAACCTC	ACCGCTGCTA	CCAATGAGGT	360
TCCTGAGGTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

GAATTCGGCC	AAAGAGGCCT	ACTTAACCAG	AATGACAGTC	TTTCCCCTAT	CTTCCTTCTT	60
TATTCTTATC	TTCTATCTTT	CCCTCCCAAA	CTCTTTCCCC	GACATAACAG	AAAACATGAA	120
GGAATTAAAG	GAGGCCAGGC	CGCGCAAAGA	TAACAGGCGT	CCAGATCTGG	AAATCTATAA	180
GCCTGGCCTT	TCTCGGCTAA	GGAACAAGCC	CAAAATCAAG	GAACCCCTTG	GGAGTGAGGA	240
ATTCAAAGAT	GAAATTGTTA	ATGACCGAGA	TTGCTCTGCT	GTTGAAAATG	GTACACAGCC	300
CGTCGAG						307

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

GGAGCTGCAC	ATGGTACTTT	TGGAGAGCCT	GGTGGAAATC	ATTTTGGTTG	CTGTTTCAGCA	60
TGTGGATTAT	AGTCTTCGAT	GTGAGCAGGA	TCCAGAGAAG	AAAGCTTTTA	TCAGACAGAA	120
TGCATCCTTT	TTATATGAAA	CAGTCTCCC	TGTGGTGGAG	AAAAGGTTTG	AAGAAGGTGT	180
GGGGAAACCT	GCCAAGCAAC	TCCAAGATCT	GAGGAATGCA	TCTAGACTTA	TTCTGTGAA	240
TCCTGAAGTC	GAG					253

## (2) INFORMATION FOR SEQ ID NO:120:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC	AAAGAGGCCT	ACACATATTG	GAAAAATGAT	CTTTTGGGAG	CACTGTTCTG	60
CTGCTTAGAC	CCAGTACTCA	CTATTGCTGC	TAGTCTCAGT	TTCAAAGATC	CCATTTGTCA	120
TTCCACTGGG	AAAAGAAAAG	ATTGCAGATG	CAAGAAGAAA	GGAATTGGCA	AAGGATACTA	180
GAAGTGATCA	CTTAACAGTT	GTGAATGCGT	TTGAGGGCTG	GGAAGAGGCT	AGGCGACGTG	240
GTTTCAGATA	CGAAAAGGAC	TATTGCTGGG	AATATTTTCT	GTCTTCAAAC	ACACTGCAGA	300
TGCTGCATAA	CATGAAAGGA	CAGTTTGCTG	AGCATCTTCT	TGGAGCTGGA	TTTGTAAGCA	360
GTAGAAATCC	TAAAGATCCA	GAATCTAATA	TAAATTCAGA	TAATGAGAAG	ATAATTAAAG	420
CTGTCGAG						428

## (2) INFORMATION FOR SEQ ID NO:121:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC	AAAGAGGCCT	ACAAGACGTC	ATTTTCACAAA	GTGCGCCATT	CTGAGGATAT	60
GCAGTTTGCC	TTCTCTTATT	TTTATTATCT	CATGAGTGCA	GTGCAGCCAC	TGAATATATC	120
TCAAGTCTTT	GATGAAGTTG	ATACAGATCA	ATCTGGTGTC	TTGTCTGACA	GAGAAATCCG	180
AACACTGGCT	ACCAGAATTC	ACGAACTGCC	GTTAAGTTTG	CAGGATTTGA	CAGGTCTGGA	240
ACACATGCTA	ATAAATTGCT	CAAAAATGCT	TCCTGCTGAT	ATCACGCAGC	TAAATAATAT	300
TCCACCAACT	CAGGAATCCT	ACTATGATCC	CAACCTGCCA	CCGGTCACTA	AAAGTCTAGT	360
AACAACTGT	AAACCACTAA	CTGACAAAAT	CCACAAAGCA	TATAAGGACA	AAAACAAATA	420
TAGGTTTGAA	ATCATGGGAG	AAGAAGAAAT	CGCTTTTAAA	ATGATTTCGTA	CCAACGTTTC	480
TCATGTGGTT	GGCCAGTTGG	ATGACATAAG	AAAAAACCT	GTCGAG		526

## (2) INFORMATION FOR SEQ ID NO:122:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GGGTGGCAAT ATGGACTTCC TCTTTTCTGC CANCCCANAC CCATACATCG GGATTCCTAT	60
AATACCTTCG TTGGTCTCCC TAACATGTAG GTGGNGNGG GGAGATATAC AATAGAACAG	120
ATACCAGACA AGACATAATG GGCTAAACAA GACTACACCA ATTACACTGC CTCATTGATG	180
GTGGNACATA ACGAGCTAAT ACTGTAGCCC TAGACTTGAT AGCCATCATC ATATCGAAGT	240
TTCCTACCC TTTTCCATT TGCCATCTAT TGAAGTAATA ATAGGCGCAT GCAACTTCTT	300
TTCTTTTTT TTCTTTTCTC TCTCCCCGT TGTTGTCGAG	340

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCGGCC AAAGAGGCCT ACGTCCTTTT AAATCTTAAT GAAATATCAT GGAATATTGT	60
ATGGTCTTCA TATCGTTCTA TATAATGCAA ATGGTGAAC TCTCTGTTCT TTGCTTTCCT	120
GAAAGCATCC ATCCGATCAG TAGCTTTCCC AATAGAAAAA CCTGCAGTC CTTTCCGTT	180
CCCCACAGCC ACCAAGACAC GGATCGATT CTTTCTCCC TCTTCGCAG TCATAGTGAA	240
AACGTTTCTT ACCTCAAGTA TCCTGGTATC AAAATCCTCA TATGTTTCTC CACAGTCGAG	300

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCGGCC AAAGAGGCCT ACCAGCTTTG AGGTTGACCT GTTCTCTTT GTCTGCCTTC	60
CCAAAACACC AGCCCCCAGG AAGACATTAA GCAGCCTTAA GCTTAAATTC CTACTCCCTC	120
TTCCAAATTT GGCTCACTTG CCTTAGATCC AAGGCAGGGA AAGGAAAAGA AGGGGGGTCT	180
CTGGCTTTAT TACTCCCCTA AGTCTTTACT CTGACTTCCC CAAACCCAGA AAGATTTTCT	240
CCACAGTGTT CATTGAAAG AGGAGTATTT TGTCCCATTT TCCCCTTCCT CATTATCAAA	300
CAGCCCCAGT CTTCTTGTC TCTGCTAAGA AAGTAGAGGC ATGATGATCT GCCTCTCAAC	360
TGCCCTAGTC GAG	373

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC	AAAGAGGCCT	ACGCAGATAC	GGGCTTACAG	ATACTTTTAA	CACTCTTACA	60
AAATGTTGCA	CAAGAAGAAG	CTGCAGCTCA	GAGTTTTTAT	CAAACCTATT	TTTGTGATAT	120
TCTCCAGCAT	ATCTTTTCTG	TTGTGACAGA	CACTTCACAT	ACTGCTGGTT	TAACAATGCA	180
TGCATCAATT	CTTGCAATATA	TGTTTAATTT	GGTTGAAGAA	GGAAAAATAA	GTACATCATT	240
AAATCCTGGA	AATCCAGTTA	ACAACCAAAT	CTTTCTTCAG	AAATATGTGG	CTAATCTCCT	300
TAAGTCGGCC	TTCCCTCACC	TACAAGATGC	TCAAGTAAAG	CTCTTTGTGA	CAGGGCTTTT	360
CAGCTTAAAT	CAAGATATTC	CTGCTTTCAA	GGAACATTTA	AGAGATTTC	TAGTTCAAAT	420
AAAGGAATTT	GCAGGTGAAG	ACACTTCTGA	TTTGTTTTGT	GAAGAGAGAG	AAATAGCCCT	480
ACGGCAGGCT	GATGAAGAGA	AACATAAACG	TCAAATGTCT	GTCCCTGGCA	TCTTTAATCC	540
ACATGAGATT	CCAGAAGAAA	TGTGTGATTA	AAATCCAAAT	TCATGCTGTT	TTTTTCTCT	600
GCAACTCGTT	AGCAGAGGAA	AACAGCATGT	GGGTATTTGT	CGAG		644

(2) INFORMATION FOR SEQ ID NO:126:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC	AAAGAGGCCT	ACGTTATACT	ATTAGATCCT	TTCATTATCA	ATCCCTTTTA	60
AAGGCAAGGA	AACAGGTTCA	GCAAGATCAG	CTGACTTCTC	TGTGTAAGTG	GGACCTGAGA	120
TTTGAAAGTT	GAGAGCAGCA	TGTTTTGCCC	ACTGAACTC	ATCCTGCTGC	CAGTGTTACT	180
GGATTATTCC	TTGGGCCTGA	ATGACTTGAA	TGTTTCCCG	CCTGAGCTAA	CAGTCCATGT	240
GGGTGATTCA	GCTCTGATGG	GATGTGTTTT	CCAGAGCACA	GAAGACAAAT	GTATATTCAA	300
GATAGACTGG	ACTCTGTCAC	CAGGAGAGCA	CGCCAAGGAC	GAATATGTGC	TATACTATTA	360
CTCCAATCTC	AGTGTGCCTA	TTGGGCGCTT	CCAGAACC GC	GTACACTTGA	TGGGGGACAA	420
CTTATGCAAT	GATGGCTCTC	TCCTGCTCCA	AGATGTGCAA	GATGTCGAG		469

(2) INFORMATION FOR SEQ ID NO:127:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGACT	CGCGCCATC	TCAGGTCTCT	TGGCTTTGCC	60
AGGGCCACC	GGAGAAAAC	GACGACCCGT	TTCTGTAATC	CTTATGGGAG	ACCAACCTTG	120
TGCTCCGGG	AGATCCACTC	TCCACCTGG	AAACGCACGG	GAAGCCAAGC	CTCCAAAAAA	180
GCGCTGCCTC	CTCGCTCCGC	GTTGGGATTA	TCCGGAAGGA	ACTCCCAACG	GAGGTAGTAC	240
CACTCTACCC	TCCGCACCTC	CTCTGCATC	AGCCGGCCTG	AAGTCGCACC	CTCCTCCTCC	300
GGAGAAGTAG	AGAAATAAAT	TTCTCCACC	CTAAACCACT	CTTTGAGTGA	TTGCACTATG	360
ACTCCATTTC	CCTGGTGCAT	TCATATAATA	GTTACACCTG	TGAAAACAAT	GAAGATTATT	420
TACAATGCTA	CCCGG					435

(2) INFORMATION FOR SEQ ID NO:128:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```
GAATTCGGCC AAAGAGGCCT AACCAAGCAG AAGCTGTACC ACAAGAAGAT CTTCGGACT      60
GCCATGCTGT TCCAGTTTGT GAACGTGCTG CTCCAGGTCC TGGTCCACAA GTCCCATGAT      120
CTTCTGCAGG AGGAGATTGG CATCGCCATC TACAACATGG CCTCAGTCGA G              171
```

(2) INFORMATION FOR SEQ ID NO:129:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 372 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```
GAATTCGGCC AAAGAGGCCT AGTCATGACT CCCCTGATTT GGCTCCTAAT GTCACCTATT      60
CCCTGCCCAG AACCAAAAGT GGTAAAGCCC CAGAAAGAGC CTCTAGCAAG ACTTCTCCAC      120
ATTGGAAGGA GTCAGGAGCC TCCCATTTGT CATTCCCAA GAACAGCAA TATGAGTATG      180
ACCCTGACAT CTCTCTCCA CGAAAAAAGC AAGCAAAATC CCATTTTGA GACAAGAAGC      240
AGCTTGATTC CAAAGGTGAC TGCCAGAAAG CAACTGATTC AGACCTTCT TCTCCACGGC      300
ATAAACAAAG TCCAGGGCAC CAGGATTCTG ATTCAGATCT GTCACCTCCA CGGAATAGAC      360
CTAGACACCG GG              372
```

(2) INFORMATION FOR SEQ ID NO:130:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 378 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```
GAATTCGGCC NAAGAGGCCT AGGGTGGGAC AAGAGAGTGA GACTAGAATA TAAATATCCG      60
TAAACAGCAT CTGAGCATTG GTCTTTAACA GGGAGGAGGA ACCACTGGTG TATATTAATT      120
TAGGACACAG GATCATTATA GGGGTNGGGC CAGCTGGTGT TAATGGCATG CAGGCATATG      180
TGATGCCAAC CATGAGGGCT GGAAGAACCA GAAGCCAAAG AAGAATATGA CCGCATCTAT      240
TCTAAAGCTA CTGTGGTGGT TTCTCATGCT TCAGAGTCTC GTAAGTCTCC TGGTTCCTGG      300
TGCTCAGGCC CGTGTAACA CCATCTGATT TCTCATAGCT GGTATAGCT GCCTTTCGCA      360
CTTGGATCTT CAGTCGAG              378
```

(2) INFORMATION FOR SEQ ID NO:131:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 414 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCGGCC	AAAGAGGCCT	AGGTGCCGCG	GTCTGTCTT	GCTGTGCCTG	CGGCAGGGGC	60
TCGGAACCAA	TTCATTCTG	CACGGCCTGG	GGCAGGAGCC	CTTCGAGGGA	GCTCGGTCAC	120
TGTGTTGCAG	GTCTCGCCT	AGAGACCTGC	GAGATGGAGA	AAGAGAGCAC	GAGGCGGCAC	180
AAAGGAAAGC	CCCAGGAGCA	GAGTCTTGCC	CATCTCTCCC	TCTGAGCATC	TCGGACATTG	240
GGACTGGATG	TCTTTCGTCA	CTGGAAAACC	TCAGACTGCC	GACGCTGCGG	GAAGAGTCAT	300
CCCCTCGAGA	GCTCGAGGAC	TCGAGCGGAG	ACCAGGGCCG	GTGCGGTCCC	ACACACCAGG	360
GATCCGAGGA	TCCTTCGATG	CTCTCGCAGG	CCCAGTCCGC	TACCGAGGGT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

AAGCGTGCTC	GTGCCCCGAT	TNCCNAGGGG	NTCAGTCTGT	NNCGCCCANA	GNCCAAGNCC	60
AAGCCCAAGN	CCNAGNCCAA	GGATCCANNC	CAAGGCCCCAG	GCTGCAGCCC	CAGCTTCAGT	120
TCCAGCTCAG	GCTCCCACAC	GTACCCAGGC	CCCCACAAAG	GCTTCAGAGN	AGATATCTCT	180
CCCAACATGA	GGACAGAAGG	ACTGGTGCGA	CCCCCACC	CCGCCCTGG	GCTACCATCT	240
GCATGGGGCT	GGGTCTCCT	GTGCTATTG	TACAAATAAA	CCTGAGGCAG	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

ATGGACTTCC	TCTTTTCTGC	CANCCACAC	CCATACATCG	GGAGCCTATA	ATACCCTTCG	60
TTGNTCTCCC	TAACATGTAG	GTGGCGGAGG	GGAGATATAC	AATAGAACAG	ATACCAGACA	120
AGACATAATG	GGCNAACAA	GACNACACCA	ATTACNCTNC	CTCATTGATG	GTGGNACATA	180
ACGAGCTAAT	ACTGTANCCC	TAGACNTGAT	AGCCATCATC	ATATCGAAGT	TTCACTACCC	240
TTTTTCCATT	TGCCATCTAT	TGAAGTAATA	ATAGGCGCAT	GCAACTTCTT	TTCTTTTCTT	300
TTCTTTTCTC	TCTCCCCCGN	TGTTGTCTCA	CCATATCCGC	AATGACGTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC AAAGAGGCCT ACGTTATCCG CGATGCGTTT CCTGGCAGCT ACATTCTCTG	60
TCCTGGCGCT CAGCACCGCT GCCCAGGCCG AACCGGTGCA GTTCAAGGAC TGCGGTTCTG	120
TGGATGGAGT TATAAAGGAA GTGAATGTGA GCCCATGCCC CACCCAACCC TGCCAGCTGA	180
GCAAAGGACA GTCTTACAGC GTCAATGTCA CCTTCACCAG CAATATTGAG TCTAAAAGCA	240
GCAAGGCCGT GGTGCATGGC ATCCTGATGG GCGTCCCAGT TCCCTTTCCC ATTCCTGAGC	300
CTGATGGTTG TAAGAGTGA ATTAAGTCC CTATCCAAA AGACGTCGAG	350

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCGT CGACCTCCCT TCCAGCCCCC	60
AGAAAGCTCG GTCACCTGAG TGTTTTCTAG AATCCTGGGG TGCTCCCGGG CCGTCTCAG	120
AGAAGTGGCA GGTTCACGT TCAGCCGTGT GCGGATCGT GTGGCTTCCA AAGCCTTTTA	180
CAGCCCCCGC CCCCCATCCC GTGGTCTGTC TGCAGGAACT CTCCCGTCTG TGAGAAGCCT	240
CTTTCCGAGT CGAG	254

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC AAAGAGGCCT ACTAGAGGGG TCACTGGCCC CGCACGGTGG GGTGGCCGCT	60
CAGGGCCTAG GGAGCAGGTG GGAGGGGCTT GGAGGGCAGA ACAGAGGGCC TGGGGGCTGC	120
TCTGCTGGCC ACCACTGCTT TCTGGTTGAA CCAGATAAGT AGCTGGTGGT GACGGCTGTG	180
GGCCCTGAGT CGGGGGAGAA GAGGCAGAGG GAGCAGTGGG CTGGGCTAGT GGGGACATGA	240
GTGGGTGGTG ATCATGCCTG TGTCGGGGGA GCTGAGGCAG AGAGTGGGGC AGCGAGCATC	300
CCCTGAGGGC AGGAGGAGAG GGGTGGGGAC AGGGAAGGGT CGGGGGTGGT CCCAGCCCTG	360
AAGACAGGAG TGGCGAGGGC AGGTGTGGTC TAGGTGCTTG TCGAGGTGGA CAACATGGGT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC	AAAGAGGCCT	AATGGCGTCC	AGGTCTAAGC	GGCGTGCCGT	GGAAAGTGGG	60
GTTCCGCAGC	CGCCGGATCC	CCCAGTCCAG	CGCGACGAGG	AAGAGGAAAA	AGAAGTCGAA	120
AATGAGGATG	AAGACGATGA	TGACAGTGAC	AAGGAAAAGG	ATGAAGAGGA	CGAGGTCATT	180
GACGAGGAAG	TGAATATTGA	ATTTGAAGCT	TATTCCCTAT	CAGATAATGA	TTATGACGGA	240
ATTAAGAAAT	TACTGCAGCA	GCTTTTCTA	AAGGCTCCTG	TGAACACTGC	AGAACTAACA	300
GATCTCTTAA	TTCAACAGAA	CCATATTGGG	AGTGTGATTA	AGCAAACGGA	TGTTTCAGAA	360
GACAGCAATG	ATGATATGGA	TGAAGATGAG	GTTTTTGTT	TCATAAGCCT	TTTAAATTTA	420
ACTGAAAGAA	AGGGTACCCA	GTGTGTTGAA	CAAATCAAG	AGTTGGTTCT	ACGCTTCTGT	480
GAGAAGAACT	GTGAAAAGAG	CATGGTTGAA	CAGCTGGACA	AGTTTTTAAA	TGACACCACC	540
AAGCCTGTGG	GCCTTCTCCT	AAGTGAAAGA	TTCATTAATG	TCCCTCCACA	GATCGCTCTG	600
CCCATGTACC	AGCAGCTTCA	GAAAGAACTG	TCGGGGGCAC	ACAGAACCAA	TAAGCCATGT	660
GGGAAGTGCT	ACTTTTACCT	TCTGATTAGT	AAGACATTTG	TCGAG		705

## (2) INFORMATION FOR SEQ ID NO:138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC	AAAGAGGCCT	ACCCAGCTCA	GAATCTTGCT	GCTCGGCCCC	CAGGAGAGCA	60
ACAACACAAC	GGGAACGATG	TGGAAGTGT	CAGCTCTGCT	CTTCGTTTTG	GGAAGCGCGT	120
CGCTCTGGGT	CCTGGCAGAA	GGAGCCAGCA	CAGGCCAGCC	AGAAGATGAC	ACTGAGACTA	180
CAGGTTTGGA	AGGCGGCGTT	GCCATGCCAG	GTGCCGAAGA	TGATGTGGTG	ACTCCAGGAA	240
CCAGCGAAGA	CCGCTATAAG	TCTGGCTTGA	CAACTCTGGT	GGCAACAAGT	GTCAACAGTG	300
TAACAGGCAT	TCGCATCGAG	GATCTGCCAA	CTTCAGAAAG	CCCAGTCGAG		350

## (2) INFORMATION FOR SEQ ID NO:139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC	AAAGAGGCCT	AGTGGACAGG	AAGTAGAATT	TATTGGTGAG	TATTAAGAGG	60
GGGGCAGCAC	ATTGGAAGCC	CTCATGAGTG	CAGGGCCCGT	CAC TTGTCCA	GAGGGCCACG	120
ACTGGGGATG	TACTTGACCC	CACAGCCATC	TGGGATGAGC	CGCTTTTCAG	CCACCATGTC	180
TTCAAATTCA	TCAGCATTGA	ACTTGGTGAA	GCCCCACTTC	TTTGAGATGT	GGATCTTCTG	240
GCGGCCAGGA	AACTTGAACT	TGGCCCTGCG	CAGGGCCTCA	ATCACATGCT	CCTTGTCTCTG	300
CAGCTTGGTG	CGGATGGACA	TGATAACTTG	GCCAATGTGA	ACCCTGGCCA	CAGTGCCTCTG	360
GGGCTTTCCA	AAGGCACCTC	GCATGCCTGT	TTGGAGCCTG	TCAGCCCCAG	CACAGGACAA	420
CATCTTGTG	ATGCGGATGA	CGTGGTCGAG				450

## (2) INFORMATION FOR SEQ ID NO:140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs

(C) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```
GAATTCGGCC AAAGAGGCCT ATGAAGATCA GCTATTAGAA GAGAAAGATC AGTTAAGTCC      60
TTTGGACCTG ATCAGCTTGA TACAAGAACT ACTGATTTC AACTCTTTGG CTTAATTCTC      120
TCGGAAACGA TGAAATATAC AAGTTATATC TTGGCTTTTC AGCTCTGCAT CGTTTTGGGT      180
TCTCTTGGCT GTTACTGCCA GGACCCATAT GTAAAAGAAG CAGAAAACCT TAAGAAATAT      240
TTTAATGCAG GTCAATCAGA TGTAGCGGAT AATGGAACTC TTTTCTTAGG CATTTTGAAG      300
AATTGGAAAG AGGAGAGTGA CAGAAAAATA ATGCAGAGCC AAATTGTCTC CTTTTACTTC      360
AAACTTTTAA AAAACTTTAA AGATGACCAG AGCATCCAAA AGAGTGTGGA GACCATCAAG      420
GAAGACATGA ATGTCAAGTT TTTCAATAGC AACAAAAAGA AACGAGATGA CTTTCGAAAAG      480
CTGACTAATT ATTCGGTAAC TGACTTGAAT GTCCAACGCA AAGCAATACA TGAATCATC      540
CAAGTGTGTT CTGAAGTGC GCCAGCAGCT AAAACAGGGG TCGAG                          585
```

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 471 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

```
GAATTCGGCC AAAGAGGCCT ATTGGAGTTT GAGTATAGTA AATTATGATC CTTAAATATT      60
TGAGAGTCAG GATGAAGCAG ATCTGCTGTA GACTTTTCAG ATGAAATTGT TCATTCTCGT      120
AACCTCCATA TTTTCAGGAT TTTTGAAGCT GTTGACCTTT TCATGTTGAT TATTTTAAAT      180
TGTGTGAAAT AGTATAAAAA TCATTGGTGT TCATTATTTG CTTTGCCTGA GCTCAGATCA      240
AAATGTTTGA AGAAAGGAAC TTTATTTTGG CAAGTTACGT ACAGTTTFTA TGCTTGAGAT      300
ATTTCAACAT GTTATGTATA TTGGAACCTC TACAGCTTGA TGCCTCCTGC TTTTATAGCA      360
GTTTATGGGG AGTCACTTGA AAGAGCGTGT GTACATGTAT TTTTCTCTN GGCAACATT      420
GAATGCAAAAC GTGTATTTT TTAATATAAA TATATAACTT CCTGCGTCGA G                          471
```

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 477 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

```
GAATTCGGCC AAAGAGGCCT ATGTTTGCCA ACTGGGGTGA AGGGATTGCC CTCCCCCTGC      60
TGGGATCCCC CCAGCCCCCTC CGGTCTGGCA GGAAGGGGGC AGCCTGCAAC CCCCAGGGGC      120
AGGTGTGGGG CTGCCAGATG CTCCAGGCAG GGGGCCAGAA GGGGCTCACA AAGGCTTGCC      180
CTCCAGGGAG ATGACGGCAC TGCCCCCAG CTTCTCTGCC AGGGTGCAGC GGTCTTGAC      240
CTCCTCGTAG CAGTTTGCTT GCAATTCATG CTTGATCCCT GTCAGCTTCT TCTTGATGGC      300
GTCCTTGAG CTGGCATAAA TCATTTTGCT CTTAAGGGGS GCAGACTCGG GGGCCAGAA      360
GATAAACACC AGATCCTCCT TCTTGCTCTC CYTGGTCTCA TAGGTTGCAT CATAGAGGGC      420
```

ATAGCGGCAG TATCTG GCAGCATCTT GACAAAGGTG GCGTA CGTCGAG 477

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC CAAAGAGGCC YMAAAGATCA GCTATTAGAA GAGAAAGATC AGTTAAGTCC	60
TTTGGACTTG ATCAGCTTGA TACAAGAACT ACTGATTTCA ACTTCTTTGG CTTAATTCTC	120
TCGGAAACGA TGAAATATAC AAGTTATATC TTGGCTTTTC AGCTCTGCAT CGTTTTGGGT	180
TCTCTGGCT GTTACTGCCA GGACCCATAT GTAAAAGAAG CAGAAAACCT TAAGAAATAT	240
TTTAATGCAG GTCATTCAGA TGTAGCGGAT AATGGAACCT TTTTCTTAGG CATTTTGAAG	300
AATTGGAAAG AGGAGAGTGA CAGAAAAATA ATGCAGAGCC AAATTGTCTC CTTTACTTC	360
AAACTTTTAA AAAACTTTAA AGATGACCAG AGCATCCAAA AGAGTGTCGA G	411

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

GAATCGGCCC AAAGAGGCCT ACTGAAGATC AGCTATTAGA AGAGAAAGAT CAGTTAAGTC	60
CTTTGGACCT GATCAGCTTG ATACAAGAAC TACTGATTTT AACTTCTTTG GCTTAATTCT	120
CTCGGAAACG ATGAAATATA CAAGTTATAT CTTGGCTTTT CAGCTCTGCA TCGTTTTGGG	180
TTCTCTGGC TGTTACTGCC AGGACCCATA TGTAAGAGAA GCAGAAAACC TTAAGAAATA	240
TTTTAATGCA GGTCATTCAG ATGTAGCGGA TAATGGAACCT CTTTCTTAG GCATTTTGAA	300
GAATTGGAAA GAGGAGAGTG ACAGAAAAAT AATGCAGAGC CAAATTGTCT CTTTACTT	360
CAACTTTTTT AAAACTTTA AAGATGACCA GAGCATCCAA AAGAGTGTTG AGACCATCAA	420
GGTCGAG	427

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC AAAGAGGCCT AGAGAAGATA AAAGTGGACA CTGGGGAGAC ACAACTTCAT	60
GCTGCGTGGG ATCTCCAGC TACCTGCAGT GGCCACCATG TCTTGGGTCC TGCTGCCTGT	120
ACTTTGGCTC ATTGTTCAAA CTCAAGCAAT AGCCATAAAG CAAACACCTG AATTAACGCT	180
CCATGAAATA GTTTGTCCTA AAAAAGTTCA CATTTTACAC AAAAGAGAGA TCAAGAACAA	240

```

CCAGAC  AAGCATGGCA AAGAGGAAAG GTATGAACCT GAGTTCAAT ATCAGATGAT 300
CTTAAATGGA GAAGAAATCA TTCTCTCCCT ACAAAAAACC AAGCACCTCC TGGGGCCAGA 360
CTACACTGAA ACATTGTACT CACCCAGAGG AGAGGAAATT ACCACGAAAC CTGAGAACAT 420
GGAACACTGT TACTATAAAG GAAACATCCT AAATGAAAAG AATTCTGTTG CCAGCATCAG 480
TACTTGTGNC GGGTTGAGAG GATACTTCAC ACATCATCAC CAAAGATACC AGATAAAACC 540
TCTGAAAAGC ACAGACGAGA AAGAACATGC CGTCTTTACA TCTAACCAGG AGGTCGAG 598

```

## (2) INFORMATION FOR SEQ ID NO:146:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

```

GAATTCGGCC AAAGAGGCCT AGAGCTAAGG CGAAGACCAA GACACGTGAC ATTCATGCTT 60
TGGTGTGGGG TCCAAAGCAC TCTTATTAA CATAGATTCC AAACCTTTTA CACCCATGGG 120
GTCATATATA CTCTTTATTT TACCCTTCAT TATTTTAAAA ATCACAACAT CACCCATTGC 180
CCCCGTGTCC AAAGGAATCG CTTGTAATAA ATCAGCAGGT CTAGAATTCA ATCGGGAG 238

```

## (2) INFORMATION FOR SEQ ID NO:147:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```

GAATTCGGCC AAAGAGGCCT AGAGCTAAGG CGAAGACCAA GACACGTGAC ATTCATGCTT 60
TGGTGTGGGG TCCAAAGCAC TCTTATTAA CATAGATTCC AAACCTTTTA CACCCATGGG 120
GTCATATATA CTCTTTATTT TACCCTTCAT TATTTTAAAA ATCACAACAT CACCCATTGC 180
CCCCGTGTCC AAAGGATTCT CTTGTAATAA ATCAGCAGGT CTAGAATTCA ATCGGGAGGT 240
TCTCCCTATA GTGAGTCGTA TTAATTTCAG AGGAGTATTT AGAAGAGAAG CTGAAGCTGT 300
CGAG 304

```

## (2) INFORMATION FOR SEQ ID NO:148:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GAATTCGGCC AAAGAGGCCT ACGACAGTTG GTGTAAAGGA AAACCTTCTGA GCTCCGTCAG 60
TTCACCTGGT ACATTGGAAT TAAAGTGCTT GGATGTTTTT CCCCCACTTT AAAAAAAGTT 120
TTGAGGTTTT TTTTTTTTTT TGTCTTTTAA AAACATCGTA ACATTAAAC ATGGCCGTTT 180
ACCGTCCCCC AGCGATGGGA GCTGGCCTGG GCGCCAGGGT CCTCCAGGAT CTTCACTCAT 240

```



TCACAGTAAC GCTGACC AGTCCTCCAG GTCGCACGTG GATGCC GGGTGGGGAG 300  
 GGAGGAGGAA GTGACTGTCC CACCTCTGCA GGACCATGGG AGTGGGCAAG GTGTTCTCCG 360  
 GGGCGCACCC CTGAACCCAG GGGTGCTGCA GGACNTG 397

## (2) INFORMATION FOR SEQ ID NO:149:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 592 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

GAATTCGGCC AAAGAGGCCT ATAAGAATTT AAGATGCATT TTTGCATTGG CTATATTCT 60  
 TTAAATTCTA GATAGTTATT TTCAAGTGTT GGTAAACATA AATCTTAGGC TTAGGAACCA 120  
 TTGGATTAGT AACAGCATTG TGCTAATCAA AACTTTAAAA AAATGAGTTC AAAATTGTTA 180  
 TAATGTAATT TTATAGATTT TCTTTTATCC TCAACCTGCA GAAGCCGGAA AGTGAGGCAC 240  
 ATAGCCCCAC ATAGGCAGAA ATTAAGCCT AGGCAATAAC TTAGTGAAAA TGGAAATTTT 300  
 AGAACATTCC ACTTCTTGT TAGTACAATT TTATGGCCAT GGTGCTAGCT AATGGAAATG 360  
 GCTAGTATAC TATTTATAGG CCAGCAATAT TTTGGTGAAT TTAAGCGAAA CTATGCTCAG 420  
 TATCATTGAA ATGGGGGTGG GGTGGGCTTG AGACATGAAA TCAATCATAC AAAGTCAAAA 480  
 ACTATTTTAA CCCAGGAATA AGTTAAATTC CTGTCACCCA GTCGAGGTTT TCCCTATAGT 540  
 GAGTCGTATT AATTCAGAG GAGTATTTAG AAGAGAAGCT GAAGCTGTCG AG 592

## (2) INFORMATION FOR SEQ ID NO:150:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

GAATTCGGCC AAAGAGGCCT AGATGATGAT ATGTTTAACC ACCAAGTTCC TTATTTGTGG 60  
 CTGATTTACT GCCTTTGTCA TCCTCTTCAA TCAAGTATTA AAGAAACAGT GGAGGCATAT 120  
 GAGGCAGCAT TAGGGGTGGC TATGAGATGT GATATAGTAC AGAAGATATG GATGGATTAT 180  
 CTTGTCTTTG CAAATAATAG AGCTGCTGGA TCCAGAAACA AAGTTCAAGA ATTCAAATTT 240  
 TTTACTGATT TAGTGAATAG ATGTTTGGT ACAGNCCCTG CCCGATACCC CATTCCTTTT 300  
 AGCAGNGCTG ATTACTGGTC CAACTATGAA TTTCATAATA GGGTCGAG 348

## (2) INFORMATION FOR SEQ ID NO:151:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 455 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

GAATTCGGCC AAAGAGGCCT ACAGAATTGA GAGTTTGTTC TTACACACAA GTTTAATGCC 60

ACCTTCC	CTGCCATG	GACCAACAAG	CAATATATGC	T	TAAAC	TTACCCACAG	120
ACTCAGGCC	AGAAAGTTCT	TCACCTTCAT	CTCTTCCTCG	GGATGTCTGT	CAGGGTTCAC		180
CTTGCCATCA	ATTTGCCCTG	AAACTTAGCT	GTGCTGGGAT	TATTCTCCTT	GTCTTGGTTG		240
TTACTGGGT	GAGTGTTC	GTGACATCCT	TAATACAGAA	ATCATCAATA	GAAAAATGCA		300
GTGTGGACAT	TCAACAGAGC	AGGAATAAAA	CAACAGAGAG	ACCGGGTCTC	TTAAACTGCC		360
CAATATATTG	GCAGCAACTC	CGAGTCGAGG	TTCTCCCTAT	AGTGAGTCGT	ATTAATTTCA		420
GAGGAGTATT	TAGAAGAGAA	GCTGAAGCTG	TCGAG				455

## (2) INFORMATION FOR SEQ ID NO:152:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCGGCC	AAAGAGGCCT	AAAAATCTCT	TATTAAAGGT	AGAACCTCTG	CTAGCCAGAC	60
AACATATATTA	TTTTGCTCAA	CAAAACAGTG	GACATTTCT	GAGGGGCTAC	GATTTACCAG	120
AACACATCAG	CAATCCAGAA	GATTACCACA	GATCTATCCG	CCATTCCTCT	ATTCAAGAAT	180
GAAAAATGTC	AAGATGAGTG	GTTTTCTTTT	TCCTTTTTTT	TTTTTTTTTT	TTTTGATACG	240
GGGATACGGG	GTCTTGCTCT	GTCTCCAGG	CTGGAGTGCA	GTGACACAAT	CTCAGCTCAC	300
TGTGACCTCC	GCCTCTGGG	TTCAAGAGAC	TCTCCTGCCT	CAGTCGAG		348

## (2) INFORMATION FOR SEQ ID NO:153:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCGGCC	AAAGAGGCCT	ACCTTAAAGC	CGTATACTTA	TGAATTTAAA	GTGGAAAATT	60
TTTTTGGTGG	CCCTGGCCCC	CTTGCCAGAT	TCCAGCTGGC	CGTCAGTGCT	CGCGTGTCTC	120
TCTGAAGAGG	CTCTGCGGTT	CTGGTCCCTG	TGCCTGAGCT	CCAGGTGCCG	CCAGACATTA	180
TACAACGTGA	AGGCTGAGAT	CTTCCCCCT	TCGGGAATGG	AGTATTGCAG	AACAGGCTCC	240
CTCTGCTCCC	TGGAGGTTT	GATCACGAGG	CTCTCAGACC	TCTTGAGGT	GGATAAAGAT	300
GAAGCACTGA	CTGAATCTGA	TGAGCATTTT	TCGACAAAGC	TTATGTATGA	AGTTGTCGAG	360

## (2) INFORMATION FOR SEQ ID NO:154:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCC	AAAGAGGCCT	ACTCATCTTG	GGTCCCAGCC	AGGCCCCCCC	AAAACCAAAG	60
------------	------------	------------	------------	------------	------------	----

```

CCCCCTCAAG TGGGTC CCAGCCTGTG CCCCAGCTT CCTGCC CAGCCCCGAG 120
CATTCTCACA CAGAGAAAGA ACAAGCAAGG GCTCCAGGGG GACAGGATGG GGCAGGGCAT 180
ACAGTGGGGG GTGGGGGGGC AGCTGGGAGG AGGGAGGGAC AAAACAAAAC ATTTTCCTTT 240
GGGTTTTTTT TTTCTTTCTT TTTTCTCCCC TTTACTCTTT GGGTGGTGTT GCTTTTCCTT 300
TCCTTTTCCC TTTGAGATTT TTTGTGTGTT GTTTCCTTTT TGTATTTTAC TGATATCACC 360
AGGATAGTTT ACTCTCCTTC TAGCTTTCTG CTTACCGCAC ACTGGATAAC ACACACATAC 420
ACACCCACAA AAATGCTCAT GAACCCAATC CGGAGAAGGT TCCAGCAGGT CCCCCACCCT 480
CCCCTCCTCC TCCTACTTCT CCTCTTGACA GCGAGGACAG GAGGGGGACA AGGGGACACC 540
TGGGCAGACC CGCCGGCTCT CCCCCACCC CACCCGTCG AG 582

```

## (2) INFORMATION FOR SEQ ID NO:155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

```

GAATTCGGCC AAAGAGGCCT AGAAATAAAA CATTCTACAC CGTCTCCTAC CAAATATTCA 60
CTATCACCAA GTAAAAGTTA CAAGGTAAAC AGGAAAGAAT GGAATCATTT CATTGTGAAA 120
TTGTTTCTGT TCTAAGTGTT TTAAATGCTG TTTTGTATT TTTATTTTTT TTTCAGTAT 180
TCTCCCGAAA CACCACCTCG ATGGACAGAA GATCGGAATT CTTTACTGAA TATGATTTCG 240
CAACAAGTAG AGCCCATGTC GAG 263

```

## (2) INFORMATION FOR SEQ ID NO:156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

```

GAATTCGGCC AAAGAGGCCT AATTCTCAG CTCCAAGCAT TAGGTAAACC CACCAAGCAA 60
TCCTAGCCTG TGATGGCGTT TGACGTCAGC TGCTTCTTTT GGGTGGTGCT GTTTTCTGCC 120
GGCTGTAAAG TCATCACCTC CTGGGATCAG ATGTGCATTG AGAAAGAAGC CAACAAAACA 180
TATAACTGTG AAAATTTAGG TCTCAGTGAA ATCCCTGACA CTCTACCAA CACAACAGAA 240
TTTTTGGAAT TCAGCTTTAA TTTTGTGCTT ACAATTCACA ATAGAACCTT CAGCAGACTC 300
ATGAATCTTA CCTTTTGGA TTAACTAGG TGCCAGATTA ACTGGATACA TGAAGACACT 360
TTTCAAAGCC ATCATCAATT AAGCACACTT GTGTTANCTG GAAATCCCCT GATATTTCATG 420
GCAGAAACAT CGCTTAATGG GCCCAAGTCA CTGAAGCATC TTTTCTTAAT CCANNCGGGA 480
ATATCCAATC TCGAGTTTAT TCCAGTGAC AATCTGGAAA ACTTGGAAG CTTGTATCTT 540
GGAAGCAACG TCGAG 555

```

## (2) INFORMATION FOR SEQ ID NO:157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

( SEQUENCE DESCRIPTION: SEQ ID NO:157

GAATTCGCCC AAAGAGGCCT AGATGATGAT ATGTTTAACC ACCAAGTTCC TTATTGTGG	60
CTGATTTACT GCCTTTGTCA TCCTCTTCAA TCAAGTATTA AAGAAACAGT GGAGGCATAT	120
GAGGCAGCAT TAGGGGTGGC TATGAGATGT GATATAGTAC AGAAGATATG GATGGATTAT	180
CTTGCTTTG CAAATAATAG AGCTGCTGGA TCCAGAAACA AAGTTCAAGA ATTCAAATTT	240
TTTACTGATT TAGTGAATAG ATGTTTGGT ACAGNCCCTG CCCGATACCC CATTCCCTTT	300
AGCAGNGCTG ATTACTGGTC CAACTATGAA TTCATAATA GGGTCGAGGT TCTCCCTATA	360
GTGAGTCGTA TTAATTCAG AGGAGTATTT AGAAGAGAAG CTGAAGCTGT CGAG	414

(2) INFORMATION FOR SEQ ID NO:158:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 590 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC NAAGAGGCCT AAGCAGATGC TGATCTCATT ATGCTTGGCC TGCCACACA	60
TGAACCGAAC TTTACCATT TTAGAGAAGA ATTCAAACCA AACAAGCCCA AACCATGTGG	120
TCTTTGTAAT CAGTTTGGAC ATGAGGTCAA AGATTGTGAA GGTTTGCCAA GAGAAAAGAA	180
GGGAAAGCAT GATGAAGTGG CCGATAGTCT TCCTTGTGCA GAAGGAGAGT TTATCTTCCT	240
TCGGCTTAAT GTTCTTCGTG AGTATTTGGA AAGAGAACTC ACAATGGCCA GCCTACCATT	300
CACATTTGAT GTTGAGAGGA GCATTGATGA CTGGGTTTTC ATGTGCTTCT TTGTGGGAAA	360
TGACTTCCTC CCTCATTTGC CATCGTTAGA GATTAGGGAA AATGCAATTG ACCGTTTGGT	420
TAACATATAC AAAAATGTGG TACACAAAAC TGGGGGTTAC CTTACAGAAA GTGGTTATGT	480
CAATCTGCAA AGAGTACAGA TGATCATGTT AGCAGTTGGT GAAGTTGAGG ATAGCATTTT	540
TAAAAGAGA AAGGATGATG AGGACAGTTT TAGAAGACGA CAGGGTCGAG	590

(2) INFORMATION FOR SEQ ID NO:159:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 322 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC AAAGAGGCCT AGACGGGCCT CGGTCAGCAG CACGGGGTGC TCCTCGGGAG	60
CCACACGCAG CTCATTGTAG AAGGTGTGGT GCCAGATTTT CTCCATGTCG TCCCAGTTGG	120
TGACGATGCC GTGCTCGATG GGGTACTTCA GGGTGAGGAT GCCTCTCTTG CTCTGGGCCT	180
CGTCGCCCCAC ATAGGAATCC TTCTGACCCA TGCCCCACCAT CACGCCCTGG TGCCTGGGGC	240
GCCCCACGAT GGAGGGGAAG ACGGCCCGGG GGGCATCGTC CCCC3CGAAG CCGGCCCTTG	300
ACATGCCCGGA GCCGTTGTCG AG	322

(2) INFORMATION FOR SEQ ID NO:160:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

```
GGGTTGACAA ATATGGACTT CCTCTTTTCT GCCNNCCCAA ACCCATACAT CGGGATTTCCT    60
ATAATACCTT CGTTGGTCTC CCTAACATGT AGGTGGCGGA GGGGAGATAT ACAATAGANC    120
AAGATACCAG ACAAGACATA ATGGGCTAAA CAAGACTACA CCAATTACAC TGCCTCATTG    180
ATGGTGGTAC ATAACGAACT AATACTGTAG CCCTAGACTT GATAGCCATC ATCATATCGA    240
AGTTTCACTA CCCTTTTTC ATTTGCCATC TATTGAAGTA ATAATAGGCG CATGCAACTT    300
CTTTCTTTT TTTTCTTTT CTCTCTCCCC CGTTGTGTGC TCACCATAG    349
```

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 688 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

```
GAATTCGGCC AAAGAGGCCT ACTATAAGAG AGATCCAGCT TGCCTCCTCT TGAGCAGTCA    60
GCAACAGGGT CCCGTCCTTG ACACCTCAGC CTCTACAGGA CTGAGAAGAA GTAAAACCGT    120
TTGCTGGGGC TGGCCTGACT CACCAGCTGC CATGCAGCAG CCCTTCAATT ACCCATATCC    180
CCAGATCTAC TGGGTGGACA GCAGTGCCAG CTCTCCCTGG GCCCCTCCAG GCACAGTTCT    240
TCCCTGTCCA ACCTCTGTGC CCAGAAGGCC TGGTCAAAGG AGGCCACCAC CACCACCGCC    300
ACCGCCACCA CTACCACCTC CGCCGCCGCC GCCACCACTG CCTCCACTAC CGCTGCCACC    360
CCTGAAGAAG AGAGGGAACC ACAGCACAGG CCTGTGTCTC CTTGTGATGT TTTTCATGGT    420
TCTGGTTGCC TTGGTAGGAT TGGGCCTGGG GATGTTTCAG CTCTTCCACC TACAGAAGGA    480
GCTGGCAGAA CTCCGAGAGT CTACCAGCCA GATGCACACA GCATCATCTT TGGAGAAGCA    540
AATAGGCCAC CCCAGTCCAC CCCCTGAAAA AAAGGAGCTG AGGAAAAGTG CCCATTTAAC    600
AGGCAAGTCC AACGTCGAGG TTCTCCCTAT AGTGAGTCGT ATTAATTTCA GAGGAGTATT    660
TAGAAGAGAA GCTGAAGCTG TCGAGACA    688
```

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```
GAATTCGGCC AAAGAGGCCT AATGATTTTG ATAGGAAGAA TGTCAGCCCA GGTTCCTCATG    60
AACATGACCA TCACAGGTTG TATGATGACG TTTTACAGGA CTACGCCGGC TGTGCTGTTT    120
TGGCAGTGGA TTAACCAAGT CTTCAATGCC GTCGTCAATT ACACCAACAA AAGTGTGAG    180
```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) LECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```

GAATTCGGNC AAAGAGGCCT ACCACCTTCT CTGCCAGAAG ATACCATTTC AACTTTAACA      60
CAGCATGATC GAAACATACA ACCAACTTC TCCCGATCT GCGGCCACTG GACTGCCCAT      120
CAGCATGAAA ATTTTATGT ATTTACTTAC TGTTTTCTT ATCACCCAGA TGATTGGGTC      180
AGCACTTTT GGTGTGTATC TTCATAGAAG GTTGGNCAAG ATAGAAGATG AAAGGRAWYY      240
TYMATKRARR WTTTKKKWTY MWKRAAACS WWCARRRRW KSMAMMMRG RRRRRRRWCC      300
YYWWYCYTWC YTKRWSYTKK KRRGRRRTW AAARCCMRKT TKGWRGGSYT TKKKRWRGRW      360
TTWTWWKKTW AAMMAMRRRG RRRMSRCGR RARRAAAMMR CYTTTGNAAT NCNCCNAGGT      420
GATCAGAATC CTCACATTGC GGCACATGTC ATAAGTGAGG CCANCAGTAA AACACATCT      480
GTGTTACAGT GGGCTGANAA AGGATACTAC ACCATGAGCA ACAACTTGGT AACCTGGAA      540
AATGGGAAAC AGCTGNCCGT TAAAAGACAA GGACTCTATT ATATCTATGC CCAAGTCGAG      600

```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```

NCCTGTTTCA TTAATTAAAT TTCCCGAAAG AACCTGAGTC ATTTCCNAC ATGAGAATAC      60
TAGAAGAATG ACCAAGACTT GCGAGACGCG ATTTNCCGGG TGGTGCGAAC AATAGANCGA      120
CCATGACCTT GAAGGTGAGA CGCGCATAAC CGCTAGAGTA CTTTGAAGAG GAAACANCAA      180
TAGGTTGCTA CCAGTATAAA TAGACAGGTA CATACAACAC TGGAAATGGT TGTCTGTTG      240
AGTACGCTTT CAATTCATTT GGGTGTGCAC TTTATTATGT TACAATATGG AAGGGAAGTT      300
TACACTTCTC CTATGCACAT ATATTAATTA AAGTCCAATG CTAGTAGAGA AG              352

```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

```

GAATTCGGCC AAAGAGGCCT AAAGAAGACA AAGATGATAG GCGGCACAGA GATGACAAAA      60
GAGATTCCAA GAAAGAGAAA AAACACAGTA GAAGCAGAAG CAGAGAAAGG AAACACAGAA      120
GTAGGAGTCG AAGTAGAAAT GCAGGGAAAC GAAGTAGAAG TAGAAGCAAA GAGAAATCAA      180
GTAAACATAA AAATGAAAGT AAAGAAAAAT CAAATAAACG AAGTCGAAGT GGCAGTCAAG      240
GAAGAACTGA CAGTGTGAA AAATCAAAAA AACGGGAACA TAGTCCCAGC AAAGAAAAAT      300
CTAGAAAGCG TAGTAGAAGC AAAGAACGTT CCCACAAACG AGATCACAGT GATAGTAAGG      360
ACCAGTCAGA CAAACATGAC CGTCGAG              387

```

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

```
GAATTCGGCC AAAGAGGCCT AAGGAAGTTG GATGTTTTGA TTTTACTGTT TATAGATGTT      60
AGATTGTACA GATTTGTCTG TATTTCTCAC CATATCTAAT GATACTTTT TCATTAGATT      120
GGTCTTCAAG AACAGTATTA GTTATAATTA TTTTGGTTAT TCAGTATATA GTTAGCTCTT      180
ACAGTTTAGC TTTATTCACC ATATTTATAC TGTGGATTCA CAGCGAGAGG TAGAGGTTAT      240
TCCAGGAGAG TTGATGACCT TCATTTAAAG TCCAACTAAA ATCAGTAGTA GAAACATAAG      300
AAAACATCTT TGCAATATTT ACTTTTGTTC CTGTTGCCG TAAATAGTAA CATTGTTTTT      360
TTTTATTTTG TGTTTGTAT AAAACAGTTG CATTACAAT ATTATTGGCC TGAGATATTG      420
ATGATATTGT GATGGTATGA AAATGTGTAC ATTCCCTGTG CAACATCAGA TTTGCAGGAA      480
AAATGAAGCA CTTACTGAAA TCGCTGGTAC TCGTCGAG      518
```

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 393 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

```
GAATTCGGCC AAAGAGGCCT AGGACAAAAC AAAACATTTT CCTTTGGGTT TTTTTTTTCT      60
TTCTTTTTTC TCCCCTTTAC TCTTTGGGTG GTGTGCTTT TCCTTTCCTT TTCCCTTTGA      120
GATTTTTTTG TTGTTGTTTC CTTTTGTAT TTTACTGATA TCACCAGGAT AGTTTACTCT      180
CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA CATACACACC CACAAAAATG      240
CTCATGAACC CAATCCGAG AAGGTTCCAG CAGGTCCCCC ACCCTCCCCC CCTCCTCCTA      300
CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG ACACCTGGGC AGACCCGCCG      360
GCTCTCCCCC CACCCACCC CGGCACCCTC GAG      393
```

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 421 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

```
GAATTCGGCC AAAGAGGCCT ACGAAGTTAC AGAACTGAGA TTCTCGGGTC CCAGACACGC      60
ACCTATGTAC CTCCCACTGG TGTCCCTGCA AAGCCTGGCG CTTTGGACAT CAATAATAAA      120
AGTGGCAGGG CTGAGCAACA CCTCAGGAGT TACTCTGGAA GGATGGAGGA GTTATGTAAC      180
ACACGAGAGT CAGGAGCCCT GTGGAAGTGC TTTTATTAGC AGTAAGGCTG ATCGTACAAA      240
AAATTCTCAG AGCTTCATAG GACAAGGTAG TACAAGTATG GATGATACAG GACTGAGGAA      300
CGGGGGACGG CTCAAAAGAA ATCAACATCG TCTGGGGCAT CCAGGTCCCG ATATTCCACA      360
ATGGCCCTTG GGTCTCCACG AACCATCCTG TGAGGTGAGA GGTACAGGAT CAGACCTCGA      420
G      421
```

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 365 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

TAGGAGATCT GGATGGCATC TACTTCGTAT GACTATTGCA GAGTGCCCAT GGAAGACGGG      60
GATAAGCGCT GTAAGCTTCT GCTGGGGATA GGAATTCTGG TGCTCCTGAT CATCGTGATT      120
CTGGGGGTGC CCTTGATTAT CTTACCATC AAGGCCAACA GCGAGGCCTG CCGGGACGGC      180
CTTCGGGGAG TGATGGAGTG TCGCAATGTC ACCCATCTCC TGCAACAAGA GCTGACCAG      240
GCCCAGAAGG GCTTTCAGGA TGTGGAGGCC CAGGCCGCCA CCTGCAACCA CACTGTGATG      300
GCCCTAATGG CTTCCCTGG ATGCAGAGAA GGCCAAGGA CAAAAGAAAG TGGAAGNATC      360
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 463 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AACACAGGAA ACATTACAAT TGAACAATGC CTCAGCTATA      60
CATTTACATC AGATTATTGG GAGCCTATTT GTTCATCATT TCTCGTGTTT AAGGACAGAA      120
TCTGGATAGT ATGCTTTCATG GCACTGGGAT GAAATCAGAC TCCGACCAGA AAAAGTCAGA      180
AAATGGAGTA ACCTTAGCAC CAGAGGATAC CTTGCCTTTT TTAAAGTGCT ATTGCTCAGG      240
GCACTGTCCA GATGATGCTA TTAATAACAC ATGCATAACT AATGGACATT GCTTTGCCAT      300
CATAGAAGAA GATGACCAGG GAGAAACCAC ATTAGCTTCA GGGTGTATGA AATATGAAGG      360
ATCTGATTTT CAGTGCAAAG ATTCTCAAA AGCCGAGCTA CGCCGGACAA TAGAATGTTG      420
TCGGACCAAT TTATGTAACC AGTATTGCA ACCCAGGCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT ACTTAGCTTC AAATCCCTAC TCCTTCACTT ACTAATTTTG      60
TGATTGGGAA ATATCCGCGC AAGATGTTGA CGTTGCAGAC TTGGCTAGTG CAAGCCTTGT      120
TTATTTTCCT CACCACTGAA TCTACAGGTG AACTTCTAGA TCCATGTGGT TATATCAGTC      180
CTGAATCTCC AGTTGTACAA CTTCACTCTA ATTTCACTGC AGTTTGTGTG CTAAAGGAAA      240
AATGTATGGA TTATTTTCAT GTAAATGCTA ATTACATTGT CTGGAAAACA AACCATTTTA      300
CTATTCCTAA GGAGCAATAT ACTATCATAA ACAGAACAGC ATCCACGCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:172:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 419 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

```
GAATTCGGCC AAAGAGGCCT ACACTCGTCT CTTTTTTTCC CCATCTCATT GCTCCAAGAA    60
TTTTTTTCTT CTTACTCGCC AAAGTCAGGG TTCCCTCTGC CCGTCCCGTA TTAATATTTT    120
CACTTTTGGA ACTACTGGCC TTTTCTTTT AAAGGAATTC AAGCAGGATA CGTTTTTCTG    180
TTGGGCATTG ACTAGATTGT TTGCAAAAGT TTCGCATCAA AAACAACAAC AACAAAAAAC    240
CAAACAAC TCCTTGATCT ATACTTTGAG AATGTTGAT TTCTTTTTT TATTCTGACT    300
TTTAAAAACA ACTTTTTTTT CCACTTTTT AAAAAATGCA CTACTGTGTG CTGAGCGCTT    360
TTCTGATCCT GCATCTGGTC ACGGTCGCGC TCAGCCTGTC TACCTGCAAC ACACTCGAG    419
```

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

```
GAATTCGGCC AAAGAGGCCT ACCCAGAAAC ATCCAATTCT CAAACTGAAG CTCGCACTCT    60
CGCTCCAGC ATGAAAGTCT CTGCCGCCCT TCTGTGCCTG CTGCTCATAG CAGCCACCTT    120
CATTCCCCAA GGGCTCGCTC AGCCAGATGC AATCAATGCC CCAGTCACCT GCTGTATATA    180
CTTCACCAAT AGGAAGATCT CAGTGCAGAG GTCGCGAGC TATAGAAGAA TCACCAGCAG    240
CAAGTGTCCC AAAGAAGCTG TGATCTTCAA GACCATTGTG GCCAAGGAGA TCTGTGCTGA    300
CCCCAAGCAG AAGTGGGTTT AGGATTCCAT GGACCACCTG GACAAGCAAC CCAAACCTGA    360
G
```

(2) INFORMATION FOR SEQ ID NO:174:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 368 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

```
TAGGACAAAA CAAAACATTT TCCCTTGGGG TTTTTTTTTT CTTCTTTTT TCTCCCTTT    60
ACTCTTTGGG TGGTGTGCT TTTCTTTCC TTTTCCCTTT GAGATTTTTT TGTGTGTGTT    120
TCCTTTTGT ATTTTACTGA TATCACCAGG ATAGTTTACT CTCCTTCTAG CTTTCTGCTT    180
ACCGCACACT GGATAACACA CACATACACA CCCACAAAAA TGCTCATGAA CCCAATCCGG    240
AGAAGGTTCC AGCAGGTCCC CCACCTCCC CTCCTCCTCC TACTTCTCCT CTTGACAGCG    300
AGGACAGGAG GGGGACAAGG GGACACCTGG GCAGACCCGC CGGCTCTCCC CCCACCCAC    360
CCCGGCAC
```

(2) INFORMATION FOR SEQ ID NO:175:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

```

GAATTCGGCC AAAGAGGCCT AGACTAACCC AGAAACATCC AATTCTCAAA CTGAAGCTCG      60
CACTCTCGCC TCCAGCATGA AAGTCTCTGC CGCCCTTCTG TGCCTGCTGC TCATAGCAGC      120
CACCTTCATT CCCCAAGGCG TCGCTCAGCC AGATGCAATC AATGCCCCAG TCACCTGCTG      180
CTATAACTTC ACCAATAGGA AGATCTCAGT GCAGAGGCTC GCGAGCTATA GAAGAATCAC      240
CAGCAGCAAG TGTCCCAAAG AAGCTGTGAT CTTCAAGACC ATTGTGGCCA AGGAGATCTG      300
TGCTGACCCC AAGCAGAAGT GGGTTCAGGA TTCCATGGAC CACCTGGACA AGCAAACCCA      360
AACTCCGAAG ACTTCACTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:176:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

```

GAATTCGGCC AAAGAGGCCT AGTATAATAC TAAGTTGAGA TGATATCATT TACGGGGGAA      60
GGCGCTTTGT GAAGTAGGCC TTATTTCTCT TGTCCTTTCTG TACAGGGAGG AATTTGAAGT      120
AGATAGAAAC CGACCTGGAT TACTCCGGTC TGAAGTCTGCA TCACGTAGGA CTTTAATCGT      180
TGAACAAACG AACCTTTAAT AGCGGCTGCA CCATCGGGAT GTCCTGATCC AACATCGAGG      240
TCGTAAACCC TATTGTTGAT ATGGACTCTA GAATAGGATT GCGCTGTTAT CCCTAGGGTA      300
ACTTGTTCCTG TTGGTCAAGT TATTGGATCA ATTGAGTATA GTAGTTCGCT TTGACTGGTG      360
AAGTCTTAGC ATGTACTGCT CGGAGGTTGG GTTCTGCTCC GAGGTCGCCC CAACCGAAAT      420
TTTTAATGCA GGTTTGGTAG TTAGGACCT GTGGGTTTGT TAGGTACTGT TTGCATTAAT      480
AAATTAAAGC CTCGAG                                     496

```

(2) INFORMATION FOR SEQ ID NO:177:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

```

TTNGGCCAAA GGGGCTTAGG ACAAACAAA ACATTTTCCT TTGGGTTTNA NTTTCTNTCT      60
TTNTTCTCCC ATTTANTNNT GGGGTGGTGT TGCTTTTCCT TTCCTTTTCC CTTGGAGATT      120
TTNTNGTGT NGTTTCCTTT TTGTATTNTA NTGATATCAC CAGGATAGTT TACTCTCNTT      180
NTAGCTNTGT GCTTACCGCA CANTGGATAA CACACACATA CACACCCACA AAAATGNTCA      240
TGAACCCAAT CCGGAGAAGG TTCCAGCAGG TCCCCACCC TCCCCTCCTC CTCNTACTTC      300
TCCTCTNGAC AGCGAGGACA GGAGGGGGAC AAGGGGACAC CTGGGCAGAC CCGCCGGCTN      360
TTCCCCCAC CCCACCCCG CACCCTCGAG                                     390

```

## (2) INFORMATION FOR SEQ ID NO:178:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```

GAATTCGGCC AAAGAGCAAT TCTCAAACTG AAGCTCGCAC TCTCGCCTCC AGCATGAAAG      60
TCTCTGCCGC CTTTCTGTGC CTGCTGCTCA TAGCAGCCAC CTTCAATCCC CAAGGGCTCG      120
CTCAGCCAGA TGCAATCAAT GCCCCAGTCA CCTGCTGCTA TAACTTCACC AATAGGAAGA      180
TCTCAGTGCA GAGGCTCGCG AGCTATAGAA GAATCACCAG CAGCAAGTGT CCCAAAGAAG      240
CTGTGATCTT CAAGACCATT GTGGCCAAGG AGATCTGTGC TGACCCCAAG CAGAAAGTGG      300
TTCAGGATTC CATGGACCAC CTGGACAAGC AAACCCAAAC TCCGAAGACT CTCGAG      356

```

## (2) INFORMATION FOR SEQ ID NO:179:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```

GAATTCGGCC AAAGAGGCCT ACCGAGACTG ACACACTGAA CTCCACTTCC TCCTCTTAAA      60
TTTATTCTTA CTTAATAGCC ACTCGTCTCT TTTTTCCTCC ATCTCATTGC TCCAAGAATT      120
TTTTTCTTCT TACTCGCCAA AGTCAGGGTT CCCTCTGCCC GTCCCGTATT AATATTTCCTA      180
CTTTTGAAC TACTGGCCTT TTCTTTTAA AGGAATTCAA GCAGGATACG TTTTCTGTGTT      240
GGGCATTGAC TAGATTGTTT GCAAAAGTTT CGCATCAAAA ACAACAACAA CAAAAAACCA      300
AACAACTCTC CTTGATCTAT ACTTTGAGAA TTGTTGATTT CTTTTTTTA TTCTGACTTT      360
TAAAAACAAC TTTTTTTTCC ACTTTTTTAA AAAATGCACT ACTGTGTGCT GAGCGCTTTT      420
CTGATCTGTC ATCTGGTCAC GGTGCGCTC AGCCTGTCTA CCTGCAGCAC CACTCTCGAG      480

```

## (2) INFORMATION FOR SEQ ID NO:180:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```

GAATTCGGCC AAAGAGCCTA ACACAGGAAA CATTACAATT GAACAATGCC TCAGCTATAC      60
ATTACATCA GATTATTGGG AGCCTATTTG TTCATCATTT CTCGTGTTC AAGACAGAAT      120
CTGGATAGTA TGCTTCATGG CACTGGGATG AAATCAGACT CCGACCAGAA AAAGTCAGAA      180
AATGGAGTAA CCTTAGCACC AGAGGATACC TTGCCTTTT TAAAGTGCTA TTGCTCAGGG      240
CACTGTCCAG ATGATGCTAT TAATAACACA TGCATAACTA ATGGACATTG CTTTGCCATC      300
ATAGAAGAAG ATGACCAGGG AGAAACCACA TTAGCTTCAG GGTGTATGAA ATATGAAGGA      360
TCTGATTTTC AGTGCAAAGA TTCTCCAAAA GCCCAGCTAC GCCGGACAA AGAATGTTGT      420

```

CGGACCA TATGTAACCA GTATTGCAA CCCACGCTCG AC

462

## (2) INFORMATION FOR SEQ ID NO:181:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 463 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC AAAGAGGCCT AACACAGGAA ACATTACAAT TGAACAATGC CTCAGCTATA	60
CATTACATC AGATTATTGG GAGCCTATTT GTTCATCATT TCTCGTGTTC AAGGACAGAA	120
TCTGGATAGT ATGCTTCATG GCACTGGGAT GAAATCAGAC TCCGACCAGA AAAAGTCAGA	180
AAATGGAGTA ACCTTAGCAC CAGAGGATAC CTTGCCTTTT TTAAAGTGCT ATTGCTCAGG	240
GCACTGTCCA GATGATGCTA TTAATAACAC ATGCATAACT AATGGACATT GCTTTGCCAT	300
CATAGAAGAA GATGACCAGG GAGAAACCAC ATTAGCTTCA GGGTGTATGA AATATGAAGG	360
ATCTGATTTT CAGTGCAAAG ATTCTCCAAA AGCCCAGCTA CGCCGGACAA TAGAATGTTG	420
TCGGACCAAT TTATGTAACC AGTATTGCA ACCCAGCTC GAG	463

## (2) INFORMATION FOR SEQ ID NO:182:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

TACGAGAAGT CCTGTAAGAC GTAAATATTT TTAAATTTCA CTGAATTTTT GTCTTTCTCG	60
GTACCATAGA ACACCACAGC CAAGAGATCT CGATCACTGC TTATGATCTT ACTGATGTAC	120
ACACTTTGGA TACACTGGAT GCTCATGTCA AAAGGTGTCA ACTCATCTTC ATCTCCATCC	180
TCTTCCTCAC CATCACCTTC TTCTTCCTCC TCCTCTTCCT CCCACCTTC TTCCTCTTCT	240
TCGTCTACCT CATTGTGAGC CTCCTGCTCC CCATTTTCCT CATTAGCATT CCCGTTAGCA	300
GGGGCGTCTC TTCCATTTTC TGCCTCTTCC ACAACTTCCT TCTTCTCCTT TAAGTCCTTG	360
GTGGTGAGT	369


## (2) INFORMATION FOR SEQ ID NO:183:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC NAAGANGCCT ATGATCNTCT TCTTTGAAGA AACATGAAGT TACACTATGT	60
TGCTGTGCTT ACTCTANCCA TCCTGATGTT CCTGACATGG CTTCACAAT CACTGAGCTG	120
TNACAAAGCA CTCTGTGCTA NTGATGTGAG CAAATGCCTC ATTCAGGAGC TCTGCCNGTG	180
CCGGCCGGGA GAAGCAATTG CTCCTGCTGT NAGGAGTGCA TGCTGTGTCT TGGGGCCCTT	240

TGGGACGANT  TGACTG TGTTGGTATG TGTAATCCTC GAAA G TGACACACCG 300  
CACCTCNAG 309

## (2) INFORMATION FOR SEQ ID NO:184:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC AAAGAGGCCT AATCTGGTT TAAGATTCTA TCCATTTCTC ACTCTCAGAT 60  
 CTGTTTGTTC CACCCTCTCC CCCTAAATAT TTGGATTTTA TATAGACCAG TAGGCTAAGG 120  
 TAGGGAAGAC CACTGACAAG TATAAATTTA AGAGTTTACA AAACCAAGGA GGCCATCCAG 180  
 CCCCTAGTTC TAAGCCATGT TCAGCACAGT GCCAAGTTTG CCTTCCCTGG CTGTCCTTGC 240  
 TTGCTTTCTG GTTGCTGTAA TTCTGAGGGG CAACCAGGCT TGCTGTAGAG AGGAGAGCCA 300  
 GATGATGTGG AAGCCTAAGG CCACACCCCT CGAG 334

## (2) INFORMATION FOR SEQ ID NO:185:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 522 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

TAACCAAGCCT TGAAAAGCCC TTCCTCTGGC TTGCTAGGAA GCTCATTGGA GACCCTAACT 60  
 TGGAAATTTGT TGCCATGCCT GCTCTCGCCC CACCAGAAGT TGTCATGGAC CCAGCTTTGG 120  
 CAGCACAGTA TGAGCACGAC TTAGAGGTTG CTCAGACAAC TGCTCTCCCG GATGAGGATG 180  
 ATGACCTGTG AGAATGAAGC TGGAGCCCAG CGTCAGAAGT CTAGTTTAT AGGCAGCTGT 240  
 CCTGTGATGT CAGCGGTGCA GCGTGTGTGC CACCTCATTA TTATCTAGCT AAGCGGAACA 300  
 TGTGCTTCAT CTGTGGGATG CTGAAGGAGA TGAGTGGGCT TCGGAGTGAA TGTGGCAGTT 360  
 TAAAAAATAA CTTTATTGTT TGGACCTGCA TATTTAGCTG TTTTGGAAAC CAGTTGATTC 420  
 CTTGAGTTTC ATATATAAGA CTGCTGCAGT CACATCACAA TATTCAGTGG TGAATCTTGT 480  
 TTGTTACTGT CATTCCCATC CTTTTTCGTT TAGAATCAGA AT 522

## (2) INFORMATION FOR SEQ ID NO:186:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 393 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC AAAGAGGCCT AGGACAAAAC AAAACATTTT CCTTTGGGTT TTTTCTTCT 60  
 TTCTTTTTTC TCCCCTTTAC TCTTTGGGTG GTGTTGCTTT TCCTTTCCTT TTCCCTTTGA 120  
 GATTTTTTTG TTGTTGTTTC CTTTTGTAT TTTACTGATA TCACCAGGAT AGTTTACTCT 180

```

CCTTCTA TTCTGCTTAC CGCACACTGG ATAACACACA CACACACC CACAAAAATG      240
CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC ACCCTCCCCT CCTCCTCCTA      300
CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG ACACCTGGGC AGACCCGCCG      360
GCTCTCCCCC CACCCACCC CGGCACCCTC GAG                                     393

```

## (2) INFORMATION FOR SEQ ID NO:187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

```

GAATTCGGCC AAAGAGGCCT ATTCTAGGAC AAGAGCCAGG AAGAAACCAC CGGAAGGAAC      60
CATCTCACTG TGTGTAACA TGACTTCCAA GCTGGCCGTG GCTCTCTTGG CAGCCTTCTC      120
GATTCTGCA GCTCTGTGTG AAGGTGCAGT TTTGCCAAGG AGTGCTAAAG AACTTAGATG      180
TCAGTGCATA AAGACATACT CCAAACCTTT CCACCCCAA TTTATCAAAG AACTGAGAGT      240
GATTGAGAGT GGACCACACT GCGCCAACAC AGAAATTATT GTAAAGCTTT CTGATGGAAG      300
AGAGCTCTGT CTGACCCCA AGGAAACTG GGTGCAGAGG GAGCTCGAG                    349

```

## (2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

```

GAATTCGGCC AAAGAGGCCT ACAAGAAAGC AAGCTCATCA TACTGGCTAG TGGTGGACCC      60
CAAGCTTTAG TAAATATAAT GAGGACCTAT ACTTACGAAA AACTACTGTG GACCACAAGC      120
AGAGTGCTGA AGGTGCTATC TGTCTGCTCT AGTAATAAGC CGGCTATTGT AGAAGCTGGT      180
GGAATGCAAG CTTTAGGACT TCACCTGACA GATCCAAGTC AACGTCTTGT TCAGAACTGT      240
CTTTGGACTC TCAGGAATCT TTCAGATGCT GCAACTAAAC AGGAAGGGAT GGAAGGTCTC      300
CTTGGGACTC TTGTTAGCT TCTGGGTTCA GATGATATAA ATGTGGTCAC CTGTGCAGAT      360
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 421 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

```

TACAGCCACA TCTGGATACA CACACACACT CTTACATTCA TACCCAGAGA CTGGTGCACA      60
GACACACACA CATCCCCCGT CCTGCCAATC AGTCCCAGGA ACACACAGGT CTCTATCAAC      120
ACCCGAAAT TCTGACACCA CAAGCACAGG CCAACCTACA GCTAGAGGAT TAATGTCCAG      180

```

ACCCACAGGC	GTGCGC	ATGTCCTTCC	ACGTGAATGT	CACAT	GACAGACTGC	240
ATGGATTTT	TTAATGACAC	TATTTTATTT	ATTTTTTGAG	ACAGAGTCTC	ACTCTGTGCGC	300
CCAGGATGGA	GTGCAGTGGC	GTGATCTCGG	CTCACTACAA	CCTCCGCCTC	CTGGGTTCAA	360
GCGATTCTCG	TGCCTCAGCA	TCCCAAGTAC	CTGGGATTAC	AGGCGCATGC	CACCACGTCC	420
A						421

## (2) INFORMATION FOR SEQ ID NO:190:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC	AAAGAGGCCT	AGGGAGATCT	GGATGGCATC	TACTTCGTAT	GACTATTGCA	60
GAGTGCCCAT	GGAAGACGGG	GATAAGCGCT	GTAAGCTTCT	GCTGGGGATA	GGAATTCTGG	120
TGCTCCTGAT	CATCGTGATT	CTGGGGGTGC	CCTTGATTAT	CTTCACCATC	AAGGCCAACA	180
GCGAGGCCTG	CCGGGACGGC	CTTCGGGCAG	TGATGGAGTG	TCGCAATGTC	ACCCATCTCC	240
TGCAACAAGA	GCTGACCGAG	GCCCAGAAGG	GCTTTCAGGA	TGTGGAGGCC	CAGGCCGCCA	300
CCTGCAACCA	CACGTGTATG	GCCCTAATGG	CTTCCCTGGA	TGCAGAGAAG	GCCCAAGGAC	360
AAAAGAAAAA	GGAGGAGCTC	GAG				383

## (2) INFORMATION FOR SEQ ID NO:191:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCGGCC	AAAGAGGCCT	ACCCAGTCC	AGATCCAGGA	CTGAGATCCC	AGAACCATGA	60
ACCTGGCCAT	CAGCATCGCT	CTCCTGCTAA	CAGTCTTGCA	GGTCTCCCGA	GGGCAGAAGG	120
TGACCAGCCT	AACGGCCTGC	CTAGTGGACC	AGAGCCTTCG	TCTGGACTGC	CGCCATGAGA	180
ATACCAGCAG	TTCACCCATC	CAGTACGAGT	TCAGCCTGAC	CCGTGAGACA	AAGAAGCACG	240
TGCTCTTTGG	CACTGTGGGG	GTGCCTGAGC	ACACATACCG	CTCCCGAACC	AACTTCACCA	300
GCAAATACAA	CATGAAGGTC	CTCTACTTAT	CCGCCTTCAC	TAGCAAGGAC	GAGGGCACCT	360
ACACGTGTGC	ACTCCACCAC	TCTGGCCATT	CCCCACCCAT	CTCCTCCGAG	AACGTCACCA	420
GTCTCGAG						428

## (2) INFORMATION FOR SEQ ID NO:192:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGCTT AAAGAGGCCT AAAGAGCTCT CACTTCAGTC TTATACCC CACTGCTATT      60
CCCTGTGGAG AAAGCCGGCT AATTGTTTGT ATAAGGCTAT CTGCCATTGT AGAATACCTT      120
TCTCTAGTAG CTGAATGACA ATCAACTATA CGTTCCATAC TAAACATGCC AGAGATAGGA      180
CTTTTAGGCC TTGCTTTACA AAAGTGGTTT TTAACAGCTG ACATGAATAT TTCCCCTTTC      240
TATTTTCTTT TTTTTTTTTT TTTTTTTTTT TGAGACGGAG TCTCGCTCTA TCCCCCACGC      300
TCGAG                                     305

```

## (2) INFORMATION FOR SEQ ID NO:193:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 0 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

## (2) INFORMATION FOR SEQ ID NO:194:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

```

GAATTCGGCC AAAGAGGCCT AANAGAAGAT GCCCCTGCTG ATCACTCTAA CCTGCTCCTC      60
TTCTGGCTCT CAGGCTACTC CATTGCCACT CAAATCACCG GTCCAACAAC AGTGAATGGC      120
TTGGAGCGGG GCTCCTTGAC CGTGCACTGT GTTTACAGAT CAGGCTGGGA GACCTACTTG      180
AAGTGGTGGT GTCGAGGAGC TATTTGGCGT GACTGCAAGA TCCTTGTTAA AACCAGTGGG      240
TCAGAGCAGG AGGTGAAGAG GGACCGGGTG TCCATCAAGG ACAATCAGAA AAACCGCACG      300
TTCACTGTGA CCATGGAGGA TCTCATGAAA ACTGATGCTG ACACTTACTG GTGTGGAATT      360
GAGAAAACCTG GAAATGACCT TGGGGTCACA GTTCAAGTGA CCATTGACCC AGCACCAGTC      420
ACCCAAGAAG AACTAGCAG CTCCCCAACT CTGACCGGCC ACCACTTGA CAACAGGCAC      480
AAGCTCCTGA AGCTCAGTGT CCTCCACCC CTCGAG                                     516

```

## (2) INFORMATION FOR SEQ ID NO:195:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

```

GAATTCGGCC AAAGAGGCCT AGCGCCCTGA AGACAGAATG TTCCATATCA GAGCTGTGAT      60
CTTGAGAGCC CTCTCCTTGG CTTCCTGCT GAGTCTCCGA GGAGCTGGGG CCATCAAGGC      120
GGACCATGTG TCAACTTATG CCGCGTTTGT ACAGACGCAT AGACCAACAG GGGAGTTTAT      180
GTTTGAATTT GATGAAGATG AGATGTTCTA TGTGGATCTG GACAAGAAGG AGACCGTCTG      240
GCATCTGGAG GAGTTTGGCC AAGCCTTTTC CTTTGAGGCT CAGGGCGGGC TGGCTAACAT      300

```



TGCTATATTG	ATACAACT	TGAATACCTT	GATCCAGCGT	TCCAA	CTCAGGCCAC	360
CAACGATCCC	CCTGAGGTGA	CCGTGTTTCC	CAAGGAGCCT	GTGGAGCTGG	GCCAGCCCAA	420
CACCCTCATC	TGCCACATTG	ACAAGTTCTT	CCTACCAGTG	CTCGAG		466

## (2) INFORMATION FOR SEQ ID NO:196:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 191 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

TAGGCAGAAT	GGGACTCCAA	GCCTGCCTCC	TAGGGCTCTT	TGCCCTCATC	CTCTCTGGCA	60
AATGCAGTTA	CAGCCCGGAG	CCCGACCAGC	GGAGGACGCT	GCCCCCAGGC	TGGGTGTCCC	120
TGGGCCGTGC	GGACCCTGAG	GAAGAGCTGA	GTCTCACCTT	TGCCCTGAGA	CAGCAGAATG	180
TGGATCGACG	T					191

## (2) INFORMATION FOR SEQ ID NO:197:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC	AAAGAGGCCT	AATGGATCTC	ATGTGCAAGA	AAATGAAGCA	CTGTGGTTCT	60
TCCTCCTGCT	GGTGGCGGCT	CCCAGATGGG	TCCTGTCCCA	GCTGCAGCTG	CAGGAGTCGG	120
GCCCAGGACT	GGTGAAGCCT	TCGGAGACCC	TGTCCCTCAC	CTGCACTGTC	TCTGGTGGCT	180
CCATCAGCAG	TAGTAGTTAC	TACTGGGGCT	GGATCCGCCA	GCCCCCAGGG	AAGGGGCTGG	240
AGTGGATTGG	GAGTATCTAT	TATAGTGGGA	GCACCTACTA	CAACCCGTCC	CTCAAGAGTC	300
GAGTCACCAT	ATCCGTAGAC	ACGTCCAAGA	ACCAGTTCTC	CCTGAAGCTG	AGCTCTGTGA	360
CCGCCGCAGA	CACGGCTGTG	TATTACTGTG	CGAGACATTG	TGGGCGCAGC	AGCTGGTTCA	420
CGTCCTACTG	GGGCCAGGGA	ACCCTGGTCA	CCGTCTCCTC	AGGGAGTGCA	TCCGCCCCAA	480
CCCTTTTCCC	CCTCGTCTCN	TGTGAGAATT	CCCCGTCGGA	TACGAGCAGC	GTGGCCGTTG	540
GCTGCCTCGC	ACAGGACTTC	CTTCCCGACT	CCATCACTTT	CTCCTGGAAA	TACAAGAACA	600
ACTCTGAAC	CGAG					614

## (2) INFORMATION FOR SEQ ID NO:198:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 0 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

## (2) INFORMATION FOR SEQ ID NO:199:

- (i) UENCE CHARACTERISTICS:  
 (A) LENGTH: 427 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC AAAGAGGCCT ANACTGCAGC TCTTTTCATT TTGCCATCCT TTTCCAGCTC	60
CATGATGGTT CTGCAGGTTT CTGCGGCCCC CCGGACAGTG GCTCTGACGG CGTTACTGAT	120
GGTGCTGCTC ACATCTGTGG TCCAGGGCAG GGCCACTCCA GAGAATTACC TTTTCCAGGG	180
ACGGCAGGAA TGCTACGCGT TTAATGGGAC ACAGCGCTTC CTGGAGAGAT ACATCTACAA	240
CCGGGAGGAG TTCGCGCGCT TCGACAGCGA CGTGGGGGAG TTCCGGGCGG TGACGGAGCT	300
GGGGCGGCCT GCTGCGGAGT ACTGGAACAG CCAGAAGGAC ATCCTGGAGG AGAAGCGGGC	360
AGTGCCCGAC AGGATGCGCA GACACAATA CGAGCTGGGC GGGCCCATGA CCCTCACAGA	420
ACTCGAG	427

(2) INFORMATION FOR SEQ ID NO:200:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

TAGGGATGTC AACATGATCT TTTTATATAT GCTGGCTATA GAAATTGGTC TCGGTGAAGT	60
AATGGTCTGT CTGTCAAGCA TGACATCCTT GCCTGTGTTA AGTTTTTGT TCTCTTCTGG	120
GATGTTGATC GTGACGTCTT GTCCGGGATT GAGAAGCTTC TGTTGCTCTT CTGGGATGTC	180
ATTATGATC TCTTCATATA TGCTGGCTAT AGAAATTGGG CTCTGTGAAG AAATAGTGTG	240
TCCCCAACCT TGGTACAGNC CCCTGGGGA GGTACCTTT GAAGAACCAG AAGTTAGANC	300
TTGTGAAGAA GAAGAAAGTA GG	322

(2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 272 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

GAATTCGGCC AAAGAGGCCT ATGGAGTGTG AGAACAGCAA AAAATAATAA TTCAACCAGT	60
TGTTTATTAT GAACATCATT TTCATATTTT TAAAAATATG CTATATCATG GAATTCATG	120
TAAAACCTCA AGAGATGCCA TCCTTGGAGA GGGCTGCACC AGCCTGTGCC CCAAGTTACC	180
CAGGATCACC CCCTACTTCT CCTGACGGCC CCCCAGAGAA GGCCTGCATT CTGGGCGACG	240
TGGCCTTCAG GGGCTCAACC CTTGGCCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```
GAATTCGGCC AAAGAGGCCT AGCCAATTG GTTTCTAAG TATTTTCACG CCTTCTCCTC      60
GTGTCCGCGT CACTGCTCTG ATTCAAGCCC TTGTCATTTC TCATCTTTGC CATTTTAGTA      120
GTTTTTGGAT TGGGCTCCCG GCTGCTAAT TTGTCCCCTT TTCCACTATC TTCCACATTG      180
TCACCGCAGT CATGTTTCTA AGGCAGAATC TCACTGTGCC CCACATCGTG TTGCTGGGGC      240
CTTGCATGCC GTACCCTGGC CTTTGTGAAA TGCCCTTCAT CTGTGCTCTT CCCTCCACCT      300
GGAATGTCCG TCTCTCTTTT TCTGCCAACC CACNCGACCC CTCCCTCCTN CAAGCCCGTG      360
AGTGTCCCCN CCTTCCATGT CCTGTGGTGA CAGAGCTCGA G                                401
```

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 395 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

```
GAATTCGGCC AAAGAGGCCT ACGATATTTG CTGCGACCCG CAGGCGCTAT CCGCTGCCGG      60
GTTCTGGCGC GCCCTTTCAG TTCTGCTTGC TGTCCGCACC GNTGCGTTAC CCGGAACCGC      120
CGGGCCGAAC AGCATGACGT CCGCTTTGGA GAACTACATC AACCGAACTG TTGCCGTTAT      180
TACATCAGAT GGGAGAATGA TTGTGGGAAC ACTGAAAGGT TTTGACCAGA CCATTAATTT      240
GATTTTGGAT GAAAGCCATG AACGAGTATT CAGCTCTTCA CAGGGGGTAG AACAGTGGT      300
ACTAGGATTA TACATTGTAA GAGGTGACAA CGTTGCAGTC ATTGGAGAAA TCGATGAAGA      360
AACAGATTCT GCGCTTGATT AGGGAACAC TCGAG                                395
```

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 395 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

```
GAATTCGGCC ANAGAGGCCT AAGAGCCAGT AAAAAAATTG TTAGAAAGCA GATACCATCA      60
AATTGGTTCT GGGAAAGTGT AAATCAAAGT TGCACAACCC AAAGAGGTAT ATAGGCAGCA      120
ACAGCAACAA CAAAAAGGTG GAAGAGGTGC TGCAGCTGGT GGACGAGGTG GTACGAGGGG      180
TCGTGGCCGA GGTCAAGGCC AAAACTGGAA CCAAGGATTI AATAACTATT ATGATCAAGG      240
ATATGGAAAT TACAATAGTG CCTATGGTGG TGATCAAAAC TATAGTGGCT ATGGCGGATA      300
TGATTATACT GGGTATAACT ATGGGAAC TAAGATATGGA CAGGGATATG CAGACTACAG      360
TGGCCAACAG AGCACTTATG GCAAGGCATC TCGAG                                395
```

(2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 560 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

```
GAATTCGGCC AAAGAGGCCT AGTTTGGTCG TTCGTTGGGC GGTGCTGGTT TTTCGCTCGT      60
CGACTGCGGC TCTTCCTCGG GCAGCGGAAG CGGCGCGGCG GTCGGAGAAG TGGCCTAAAA      120
CTTCGGCGTT GGGTGAAAGA AAATGGCCCG AACCAAGCAG ACTGCTCGTA AGTCCACCGG      180
TGGGAAAGCC CCCCGCCAAA CAGTTGNCCA CGGAAANCCG CCAGGAAAAG CGCTCCNTCT      240
ACCGGCGGGG TGAAGAAGCC TCATCGCTAC AGGCCCGGGA CCGTGGCGCT TCGAGAGATT      300
CGTCGTTATC AGAAGTCGAC CGAGCTGCTC ATCCGGAAGC TGCCCTTCCA GAGGTGGTG      360
AGGGAGATCG CGCAGGATTT CAAAACCGAC CTGAGGTTTC AGAGCGCAGC CATCGGTGCG      420
CTGCAGGAGG CTAGCGAAGC GTACCTGGTG GGTCTGTTTG AAGATACCAA CCTGTGTGCC      480
ATCCACGCTA AGAGAGTCAC CATCATGCCC AAAGACATCC AGTTGGCTCG CCGGATACGG      540
GGAGAGAGAG CTTTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:206:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 411 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

```
GAATTCGGCC AAAGAGGCCT ACTAGTTTAC TTTATCCCAT CCATTTATAT ATACATATAT      60
ATACACATAT ATGTGTGTTG TTTTGTGTTT GTTTTGTGTT GTTTTTTGA GATGGAGTCT      120
CGCTCTGTGCG CCCAGGCTGG AGTGCACTGG TGTGATCTTG GCTCACTGCA ACCTCTGCCT      180
CCTGGGTTCA AGCAATTCTC CTGCCTCAGC TTCCCCGAGT AGCTGGGACT ACAGGTGTGC      240
GCCACCACGC CCGGCAAATT TTTTGTGTTT TTTTGTGTTT TGATATTTT TAGCAGAGAT      300
GAGGTTTCCC CAGGTTGGCC AGGCTGGTCT CGAACTCTTG ACCTCAGGTT ATCTGCCTGC      360
CTTGGCCTCC CAAAGTGTG GATTACAGG CGTGAGCCAC CGAACCTCGA G      411
```

(2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 0 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

(2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 411 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

```
GAATTCGGCC AAAGAGGCCT ACGTGGTGGC CGAGAGCGTA TCCCCAACTG GGA CTTCGA      60
GGCAACTTGA ACTCAGAACA CTACAGCGGA GACGCCACCC GGTGCTTGAG GCGGGACCGA      120
GGCGCA CAGA GACCGAGGCG CATAGAGACC GAGGCACAGC CCAGCTGGGG CTAGGCCCGG      180
TGGGAAAGGA GAGCGTCGTT AATTTATTTC TTATTGCTCC TAATTAATAT TTATATGTAT      240
TTATGTACGT CCTCCTAGGT GATGGAGATG TGTACGTAAT ATTTATTTTA ACTTATGCAA      300
GGGTGTGAGA TGTTCCCNCT GCTGTAAATG CAGGTCTCTT GGTATTTATT GAGCTTTGTG      360
GGACTGGTGG AAGCAGGACA CCTGGA ACTG CGCCAAAGTA GCGGACTCGA G      411
```

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 152 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```
GAATGCTGAT TGACCAGCTA AAAATCAAAT TACAAGATAG CCAAATAAC TTACAGATTA      60
ATGTATCTGA ACTTCAGACA TTGCAGTCTG AACATGNTAC ACTGCTAGAA AGGCACAACA      120
AGATGCTGCA GGAAACTGTG TTCAGCTCG AG      152
```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 355 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```
GAATTCGGCC AAAGAGGCCT ACACNTCTGC ACCTCAACCA CAGACTACAC TTGCTGAACT      60
GGCTCCTGGG GCCATGAGGC TGTCAC TGCC ACTGCTGCTG CTGCTGCTGG GAGCCTGGGC      120
CATCCCAGGG GGCCTCGGGG ACAGGGCGCC ACTCAGAGCC ACAGCCCCAC AACTGGATGA      180
TGAGGAGATG TACTCAGCCC ACATGCCCCG TCACCTGCGC TGTGATGCCT GCAGAGCTGT      240
GGCTTACCAG GTGAGTCCTT CACCACTGTC ACCCTGCCCT GCTCACACCC CTTCTCAAGC      300
CAGACCCCTC CACCCACCTC ACATTCCACC ACCGGCCTTT GATCCCCGCC TCGAG      355
```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 403 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(x) SEQUENCE DESCRIPTION: SEQ ID NO:211:

GAATTCGGCC AAAGAGGCCT AATTATAAGC ACTCAATAAT ACATTATCAA CTATTATTAC	60
TCAATTAAAA CTGGTTAACT TTAATTGAAT TTGAACTGCC ACCTAGAATA GACAAGAAAA	120
TGAAACACAA TTCTGTATGG ATGTCAGAAA CATGAAATAT AAAATGTAAT AAATAAAAAAT	180
ATTAAAAACC CCTTAGCAAA TGTTAAGGAG CGTGTCAAAT GATTCCTGTG TTGAACCTTA	240
AGCATTTAGG TGGCTGGAGC CTGAAAGTT ACCATCCCCC AATTTTCTGC TGTGTCACCTA	300
GGTTTTTTC TATTAGCAA TTCTTTCAGG TCGCCTCCAC TCTGCTCTGC CTAAGGACA	360
ACTTCATATA GTGCATTCGT GTCTTAGACT CCAGATCTC GAG	403

(2) INFORMATION FOR SEQ ID NO:212:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

GAATTCGGCC AAAGAGGCCT AAGCGTAAG CCTGGAGTGT GGGCACTGCA GTTTCAGAGG	60
CACCGATTAT GAGAATGTGC AGCTCCACAT GGGCTCCATT CATCCTGAGT TCTGTGATGA	120
TATGGATGCC GGGGGCCTGG GCAAGCTCAT CTTTACCAG AAGAGTGCAA AGCTCTTCCA	180
TTGCCATAAG TGCTTCTCA CCAGCAAGCT GTACGCCAAT GTGTACTATC ACATCAGGC	240
CAGACACGCA GCCTCGGACA AGTGGAGTGA GCAGCCGAAA GAGCAGCCGA GCAAAGACAC	300
CCGTCGAG	308

(2) INFORMATION FOR SEQ ID NO:213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 362 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

GAATTCGGCC AAAGAGGCCT ACTGTGGTAA TTCTAGAGCT AATACATGCC GACGGGCGCT	60
GACCCCTTC GCGGGGGGGA TGCGTGCAAT TATCAGATCA AAACCAACCC GGTCAGCCCC	120
TCTCCGGCCC CGGCCGGGG GCGGGCGCCG GCGGCTTTGG TGA CTCTAGA TAACCTCGGG	180
CCGATCGCAC GCCCCCGTG GCGGCGACGA CCCATTCGAA CGTCTGCCCT ATCAACTTTC	240
GATGGTAGTC GCCGTGCCTA CCATGGTGAC CACGGGTGAC GGGGAATCAG GGTTTCGATTC	300
CGGAGAGGGA GCCTGAGAAA CGGTTACCAC ATCCAAGGAA GGCAGCAGGC GCGCACCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

GAATTCGGCC AAAGAGGCCT ATTCTTTTTT AACTAATCA CCATATTGTA AATTCAGGG	60
TTTTTTTTTT GGTTAAGCT GACTCTTNGC TCTAATTTTG GAAAAAAGA AATGTGAAGG	120
GTCAACTCCA ACGTATGTGG TTATCTGTGA AAGTTGCACA GCGTGGCTTT TCCTAAACTG	180
GTGTTTTTCC CCCGCATTG GTGGATTTT TATTATTAT CAAAAACATA ACTGAGTTT	240
TTAAAGAGG AGAAAATTA TATCTGGGT AAGTGTATAT CATATATATG GGTACTTTGT	300
AATATCTAAA AACTTAGAAA CGGAAATGGA ATCCTGCTCA CAAAATCACT TTAAGATCTT	360
TTCGAAGCTG TTAATTTTC CTAGTGTGT GGACACTGCA GACTTGTCCA GTGCTCCAC	420
GGCCTGTACG GACACGACTC TCGAG	445

## (2) INFORMATION FOR SEQ ID NO:215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

GAATTCGGCC AAAGAGGCCT ACTTCACTCT CTCATTCTTA GCTGAATTT GGAAATGACT	60
TTTGATGACC TAAAGATCCA GACTGTGAAG GACCAGCCTG ATGAGAAGTC AAATGGAAAA	120
AAAGCTAAG GTCTTCAGTT TCTTTACTCT CCATGGTGGT GCCTGGCTGC TGCAGCTCTA	180
GGGGTCCTTT GCCTGGGATT AGTAGTGACC ATTATGGTGC TGGGCATGCA ATTATCCAG	240
GTGCTGACC TCCTAACACA AGAGCAAGCA AACCTAACTC ACCAGAAAAA GAAACTGGAG	300
GGACAGATCT CAGCCCGCA ACAAGCAGNA GAAGCTGTTC TCGAG	345

## (2) INFORMATION FOR SEQ ID NO:216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC AAAGAGGCCT ACTGGGGAGT CTGCTATATT GTTGTTAAGG TCTCTTTGTT	60
AGTGGTGGTA GAAATGGAG TATCCCTCT CATTGTGGT TGGTGGCTGG ATATCTGTTC	120
CTTGAAAATG TTTGATGCTA CTCTGAAAGA TCGAGAAGT AGCTTTCAGT CGGCTCCAGG	180
TACTACCATG TTTCTGCATT GGCTAGTGGG AATGGTATAT GTCTTCTACT TTGCCTCCTT	240
CATTCTATTA CTGAGAGAGG TACTTCGACC TGGTGTCTG TGGTTTCTAA GGAATTTGAA	300
TGATCCAGAT TTCAATCCAG TACAGGAAAT GATCCATTG CCAATATATA GGCACTCCCG	360
AAGATTATTT TTGTCAGTGA TTGTCTTTGG TCCTCATGTC CTCCTGATGC TTTGGCTTCC	420
TATACGTATA ATTAAGAGTG TGCTGCCTAA TTTTCTTCCA TACAATGTCA TGCTCTACAG	480
TGATGCTCCA GTGAGTGAAC TGTCCCTCGA G	511

## (2) INFORMATION FOR SEQ ID NO:217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

```
GAATTCGGCC AAAGAGGCCT AGTTTATACC CACAGAATTT TTTCATAAAA TTAACCAAAC    60
CCTTTTCACT TTGCTTAAGA CTTCACTTTT GTCCCATTAC TCTTTAAGGT TAAGACCATC    120
TATAAAATCC TCTGAACTGG ACAAATAC ATTCTCTTTA NCAAAATCCA TATTCCTATG    180
CCTTCTTATA ATCTTTTACC AAAACACCT TCCCTATACA CCTTGTACGT AAAACTGTTT    240
CTCCAGTGGT CTCAACTACA TATTATACTG TTAACCTCTTA CTCCTTTTAG CATAGCTAGT    300
AGGCATGGCT CTCCATATGT TCCCAGGCAT CTCGAG                                336
```

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 167 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

```
GAATTCGGCC AAAGAGGCCT AGTGGGTAGA TACAGACCCT AACTTTGAGC TCTAAGATGA    60
AATTTGTTTA TAAATCCCTA GTTCCATTG AGTTTTTTCA ATATTTATCA AACACCTACT    120
GTGCCAGGCA TTGTTTAGGC ACAGGGGATA CAGCAGAAAA ACTCGAG                                167
```

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

```
GAATTCGGCC AAAGAGGCCT ACACAGCCT TTGGCACAAT GAAGTGGGTA ACCTTTATTT    60
CCCTTCTTTT TCTCTTTAGC TCGGCTTATT CCAGGGGTGT GTTTCGTCGA GATGCACACA    120
AGAGTGAGGT TGCTCATCGG TTTAAAGATT TGGGAGAAGA AAATTTCAAA GCCTTGGTGT    180
TGATTGCCTT TGCTCAGTAT CTTCAGCAGT GTCCATTGTA AGATCATGTA AAATTAGTGA    240
ATGAAGTAAC TGAATTGCA AAAACATGTG TTGCTGATGA GTCAGCTGAA AATTGTGACA    300
AATCACTTCA TACCCTTTT GGAGACAAAT TATGCACAGT TGCAACTCTT CGTGAAACCT    360
ATGGTGAAAC CCTCGAG                                377
```

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 310 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:



```

CTTGGGGGTG GGTTCNNNNT ANNAAAAATT ANAGNCGTTG GGGGTTG GGCNGAGAAG      60
GAANANAGAA CCCNCGGNAA AATTTGAAAA CNGGNTNATT TATCCNGTNT TTNAANGAG      120
AATCCCANNC CCGGAAAAAA AAAAAAANG AGGAANANAN AGATTGTAAG TTAACAACAA      180
AATCTATCTG TATAAGTCTT TACTGTGACA AGTGTGACA AGTCAGTNAG GTTTGGTCTC      240
TGCAGAGCCA GAACTTCAGA GAAGGTGATT TAATTGTAGG CNTCTTTGGT AGGCCTCTTT      300
GGCCGAATTC                                     310

```

## (2) INFORMATION FOR SEQ ID NO:221:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

```

GAATTCGCCC AAGAGGCCTA AAGAGGCCTA GAAGCCAAAA AACTTTTCCC GAAAGGAGTC      60
TTCACCAAAG AGCTCCCATC TGGCAAGAAA TACCTCCGCT ACACACCCCA GCCTTAAGTC      120
TCTTGGAGAA GCTGGTGCTG TGAGCCAGAG GATGTCAGCT GCCAATTGTG TTTTCCTGCA      180
GCAATTCCAT AAACACATCC TGGTGTGATC ACAGCCAAGG TTTTATAGTT GCTATACCAA      240
TGGCTTATTA AATGAAAATG GCACTAAAAG TTTCTTGAGA TTCTTTATAC TCTCTGCCTT      300
CAGCAATCTC GAG                                     313

```

## (2) INFORMATION FOR SEQ ID NO:222:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

```

GAATTCGGCC AAAGAGGCCT AGGAACCACT GGCTTGGTGG ATTTTGCTAG ATTTTCTGTA      60
TTTTTAAACT CCTGAAAAAT ATCCCAGATA ACTGTCATGG AGCTGGTAAC TATCTTCTCTG      120
CTGGTGACCA TCAGCCTTTG TAGTTACTCT GCTACTGCCT TCCTCATCAA CAAAGTGCCC      180
CTTCCTGTTG ACAAGTTGGC ACCTTTACCT CTGGACAACA TTCTTCCCTT TATGGATCCA      240
TTAAAGCTTC TTCTGAAAAC TCTGGGCATT TNTGTTGGGC ACCTTGTTGA GGGGCTAAGG      300
AAGTGTGTAA ATGAGCTGGG ACCAGAGGCT TCTGAAGCTG TGGAGCAACC GCTCGAG       357

```

## (2) INFORMATION FOR SEQ ID NO:223:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```

GAATTCGGCC AAAGAGGCCT ATTAAATGTG TCATTGGAAG CCATCCCTTT TTTTACATTT      60
CATACAACAG AAACCAGAAA AGCAATACTG TTTCCATTTT AAGGATATGA TTAATATTAT      120

```

TAATATAAT ATGATGATGA TGATGATGAA AACTAAGGAT TTTC AAGAG ATCTTTCTTT 180  
 CCAAAACATT TCTGGACAGT ACCTCGAG 208

## (2) INFORMATION FOR SEQ ID NO:224:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

TNAACCAAT AGTTTTTTAA AAGACAAGCT TGGGTGGGTG CANGNTGGGG ACAGTGCTGG 60  
 TCTTTCACNG CAGCCCAGGC ACCCNTTGAG AGTCCCAGNG NNGTGNATGC CCCGAGCCAG 120  
 TNAAGATGAA GGGAGAGCGG GTGCGGGGGC CATCNTCGGN GTCCCAGCCC GGCCCATGGG 180  
 ANTGAGTNGC GGCCTCTGCT TGTGACNTG GNGCTGGCT GTCCNATTTT ACTACTATTG 240  
 ACCCTGAAGG CCATCGAGGA GGGCACGATG GAGGAGATCG AAGAGGAGGT CCGGCAGAAG 300  
 AAATCATCAC GGAAGCGCAA GCGAGACTAG GCNTCTNTGG CCGAATTC 348

## (2) INFORMATION FOR SEQ ID NO:225:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 483 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GAATTCGGCC AAAGAGGCCT ACTTCTCTG CAGATCATGG GGCCCTTGAT TGTGCTTGTTG 60  
 GGATTGTGTT TCTTCGTGGT TGCCCATGTT AAGAAGAGAA ACACGCTGAA TGCTGGCCAG 120  
 GATGCCCTCTG AGAGAGAAGA GGGACAGATC CAGATTATGG AGCCTGTCCA GGTCACTGTA 180  
 GGTGACTCGG TAATAATATT TCCACCCCTT CCACCACCTT ACTTCTCTGA ATCTTCAGCT 240  
 TCTGCGGTCG CTGAGAGTCC TGGAACTAAC AGTCTGCTTC CGAATGAAAA CCCCCCTTCA 300  
 TATTACAGTA TTTTCAACTA TGGCAGGACC CCAACTTCAG AGGGTGCAGC CTCTGAAAGA 360  
 GATTGTGAAT CTATATATAC CATTCTGGG ACGAATTCAT CTTCTGAGGC CTCACACACT 420  
 CCACATCTTC CATCTGAATT GCCTCCTAGA TATGAAGAAA AAGAAAATGC TGCAGCACTC 480  
 GAG 483

## (2) INFORMATION FOR SEQ ID NO:226:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 500 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

GAATTCGGCC AAAGAGGCCT ACGATTACAA TCATGATTTC CAGAATGGAG AAGATGACGA 60  
 TGATGATGAA GATATTGATT ATGTTTGCTC TTGGAATGAA CTAAGTGGTCT TGCTCAGGTT 120  
 TCCAGTGTA CGACTACGAT CCATCCTCCT TAAGGGATGC CCTCAGTGCC TCTGTGGTAA 180

```

AAGTGAATTC GGTCACTG AGTCCGTATC TGTTCGGGC ATTCAAGC TCATTAAAAA 240
GAGTTGAGGT CCTAGATGAG AACAACTTGG TCATGAATTT AGAGTTCAGC ATCCGGGAGA 300
CAACATGCAG GAAGGATTCT GGAGAAGATC CCGCTACATG TGCCTTCCAG AGGGACTACT 360
ATGTGTCCAC AGCTGTTTGC AGAAGCACCG TGAAGGTATC TGCCCGAGCAG GTGCAGGGCG 420
TGCATGCTCG CTGCAGCTGG TCCTCCTCCA CGTCTGAGTC TTACAGCAGC GAAGAGATGA 480
TTTTTGGGGA CACTCTCGAG 500

```

## (2) INFORMATION FOR SEQ ID NO:227:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```

GAATTCGGCC AAAGAGGCCT AGGAGAAAGA AGATATTGAC ACCATCTACG GGCACCATGG 60
AACTGCTTCA AGTGACCATT CTTTTCTTC TGCCAGTAT TTGCAGCATT AACAGCACAG 120
GTGTTTTAGA GGCAGCTAAT AATCACTTG TTGTTACTAC AACAAAACCA TCTATAACAA 180
CACCAAACAC AGAATCATT CAGAAAAATG TTGTCACACC AACAACTGGA ACAACTCCTA 240
AAGGAACAAT CACCAATGAA TTAATAAAA TGTCTCTGAT GTCAACAGCT ACTTTTTTAA 300
CAAGTAAAGA TGAAGGATTG AAAGCCACAA CCACTGATGT CAGGAAGAAT GACTCCATCA 360
TTTCAAACGT AACAGTAACA AGTGTTACAC TTCCAAATGC TGTTCACA TACAAAGTT 420
CCAAACCCAA GACTGAAACT CAGAGTTCAA TTAACAAC AGAAATACCA GGTAGTGTC 480
TACAACCAGA NCTCGAG 497

```

## (2) INFORMATION FOR SEQ ID NO:228:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 154 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GAATTCGGCC AAAGAGGCCT ACTTTTTTAA TATAAATTTT GTTGATATGG AATTAGGTAA 60
GTTTAAGTGT CTATGTGCAT ATGTTTTTAA TATAAGTTT TTCTATTCA TTTACNGAT 120
CCAACTGGCA GTGGGTAAAT ATGGCGAGCT CGAG 154

```

## (2) INFORMATION FOR SEQ ID NO:229:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 387 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```

GAATTCGGCC AAAGAGGCCT AGGAATGGTT TTNATTGGT CCTTATTTT AACCTGCCCC 60
TGAGACTTAT ATGCTTGTTT ATACCATGTA CGTAGTGTG GATTGTATGT GTTTGTATTT 120

```

```

GTCCACA   CCCAAAACAT GGGCTGTTAC TCCCTTTTCT AATGTGGTTT CCTTATTCCC   180
ACCCTTCTCT TTCCACCCAG GTATCTGGAC AGGAAGACTT CTACCATCAG CTTTACCAGA   240
GGAAGCTGCA GGCCCCACTG TGGCCAGCT CCCTGGGCAT CACTGATTGC TATCAGTATG   300
TCACCTCCTG TCACCCCAAG AGATCAGAGA GACGCAAGTA TGGCCGAGAC TTCTGCTAC   360
GTTTCGGCTT CTGCAGCATC GCTCGAG                                     387

```

## (2) INFORMATION FOR SEQ ID NO:230:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC AAAGAGGCCT ACCTTCATTT GTTAGATTAT ATCAGTACCC CAACTTTGCT   60
GGACCTCATG CAGCTTTAGC TAATAAAAGT TTCTTTAAGG CAGATAAAGT TACAATGCTG   120
TGGAATAAAA AAGGTATGTT AAGTATATTT TATCCCTCCC TTTGTTTATC AGTTGTTAAT   180
TTAGGCTATA TTCCTATGTG TATAACAGAA GAATCAATGC CCATTTGTGT TTTAAATCTA   240
ATTAAAGTTT TTAGTGTAT AGCTACTGCT GTGTGGTAA TAGCTAGCAC AGATGTTGAC   300
AAGACAGGAG CTTCTACTA TGGAGAACGA CTCGAG                                     336

```

## (2) INFORMATION FOR SEQ ID NO:231:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 479 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCC AAAGAGGCCT AGGGACATTG GTTGAATTGG CATGACTAGA ATAGTTGGGA   60
ATGTTTGGGA ATGGGGAGAG ATTGCTAATG GGATGTCTGC CAGGGGCAAT ACTGAAATCT   120
GCTGGTTGGT AAAGGTAGTG CCTGAGCCCA GTGCTAACCA TAGTAGTTGG AAAATTGTGT   180
ACGTTGGCTG TGGAAATCCTT ATGCGAATAT TTGTCCAATC CATCTAAATT TCTCTCTGCA   240
GCATTTTAA AAAGACATAT AGCTGAAATT TTGTCACTCC TAAAAATATT TTGTATTTCT   300
CTGCCAGAT TTGCATTTGG GTAGATCGTG CTGTAGAAGA TATATCTTGC TTTAAGATAG   360
CTGCCACTGA TTAGTTTATT TTAGTCTATT TTAATCAACT TATTGCCTTG TAATCTTTCC   420
TTTTTCATTC TCTAAATTTC TGAAATTCTA TCTTTCATGT TCCCAGGAA AACTCGAG   479

```

## (2) INFORMATION FOR SEQ ID NO:232:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 338 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGGCCT ACATGATGTC AACCAACCGTG GCTCACAAGA TGAAAGAGCA   60

```

CATTCTTTT	TTGAAGATA	TGTGTAAAGG	CATTAAAGCT	GGTGAC	CT	GTGAGAAGCT	120
GGTGGGATAT	TCTNCCGTGT	ATAGAGTCTG	TTTTGGAATG	GCTTGTTTCT	TCTTTATCTT		180
CTGTCTACTG	ACCTTGAAAA	TCAACAACAG	CAAAAGTTGT	AGAGCTCATA	TTCACAATGG		240
CTTTTGTTT	CTTTAAACTT	CTGCTGTTGG	GGGCCATGTG	CTCAGGAGCT	TTCTTCATTG		300
CAGATCAGGA	CACCTTTCTG	AACGCCGGGC	AGCTCGAG				338

## (2) INFORMATION FOR SEQ ID NO:233:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

GAATTCGGCT	TCATGGCCTA	CCCCGAACCA	CTCAGGGTCC	TGTGGACAGC	TCACCTAGTG	60
GCAATGGCTC	CAGGCTCCCG	GACGTCCCTG	CTCCTGGCTT	TTGCCCTGCT	CTGCCCTGCC	120
TGGCTTCAAG	AGGCTGGTGC	CGTCCAAACC	GTTCCGTTAT	CCAGGCTTTT	TGACCACGCT	180
ATGCTCCAAG	CCCATCGCGC	GCACCAGCTG	GCCATTGACA	CCTACCAGGA	GTTTGAAGAA	240
ACCTATATCC	CAAAGGACCA	GAAGTATTCA	TTCTTGCATG	ACTCCCAGAC	CTCCTTCTGC	300
TTCTCAGACT	CTATTCCGAC	ACCCTCCAAC	ATGGAGGAAA	CGCAACAGAA	ATCCAATCTC	360
GAG						363

## (2) INFORMATION FOR SEQ ID NO:234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

GAATTCGACC	TTCATGACCT	AGCGTAAGAG	GAGAGAGACA	CATTGAGCAG	CCAAAGGACT	60
CGGTGGAAAG	AGCAGAACAC	CATAGACAAT	ATGTCGCTCT	TGGGACCCAA	GGTGCTGCTG	120
TTTCTTGCTG	AATTTCATCAT	CACCTCTGAC	TGGATACCCC	TGGGGGTCAA	TAGTCAATCG	180
AGGAGACGAT	GTGACTCAAG	CGACTCCAGA	AACATTCAAC	GAAGATCCTA	ATCTGGTGAA	240
TGATCCCGCT	ACAGATGAAA	CAGTTTGGC	TGTTTGGCT	GATATTGCAC	CTTCCACAGA	300
TGACTTGGAG	TGCTGGGATG	AGAAATTAC	CTGCAGCAAG	GCTCTACTCT	GTGCATCGGC	360
CGGTAAACT	CGAG					374

## (2) INFORMATION FOR SEQ ID NO:235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

GAATTCGGCC	TTCTGGCCTA	GGGTGGGATA	AGTGATTNGT	ATTTGTTTNG	GTTTAAAAAC	60
------------	------------	------------	------------	------------	------------	----

ATACTT	AGAAATTAGT	CCCTTCTTT	TCCTTCTCTT	CACCAATGTC	AATTGCCCAT	120
TTCATTTGTG	TGTTTCTAAC	ATTTTCTTTT	GTTAAGAAAT	GTTGGGGCTA	TAATTTTTTT	180
GAAATCACTG	AAGGAGGGG	AAAAATAATT	TTAACACCT	GTGTTGAAAC	CTTCCATAGC	240
TTAATTGACT	GGAATAATCC	TGCCATCATT	AATAAGATGT	ACAAGGTGTA	CCTTGAGAT	300
ATACCACTGA	AGACANAGA	GGAGCTCGAG				330

## (2) INFORMATION FOR SEQ ID NO:236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

TTACACCCTG	GAAACCAAGC	ATAAGCACAC	TNTTAGCAGA	TGACTTAGAA	ATTAAGTTGT	60
TTGAATCNAG	TGAACACACT	GAAGACTCCA	ACAACCCACA	ACTCGAG		107

## (2) INFORMATION FOR SEQ ID NO:237:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

GAATTCGGCC	TTCATGGCCT	ACCCGTCGTT	AGTGAAGGGG	AAATGGGTTG	TATCCTAAGG	60
GATTGGGAAA	TGGGAAGTGA	ATTTCAGGAG	ATTGTGGAGT	ACAAGGTATG	TGTTTACGTT	120
AGGTGATGAG	CAGTGTGAGG	ATAGTGAAGT	GTGGACAGTG	TCAAATGCCT	TTCTGTAGGG	180
AAGATGAAAGT	TAGCATCATC	TTATCACTTT	TGACATGCTT	TTGTGGTTTA	TTTTGTTTGT	240
TATTTGTTTT	TTACTAGAAA	TGAAAGGCTT	TGCCAAAGCC	TCTGTACTAT	GCTTCAGAGT	300
AGGACACACA	ATTCTGAGAT	TGCTGTAGAG	GGCTCGAG			338

## (2) INFORMATION FOR SEQ ID NO:238:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGGCC	TTCATGGCCT	AGTCAGAGCC	AAAGGAAAGC	TTGAAAAATG	AAGACATTAG	60
CAGGACTTGT	TCTGGGACTT	GTCATCTTTG	ATGCTGCTGT	GACTNCCCCA	ACTCTAGAGT	120
CCATCAACTA	TGACTCAGAA	ACCTATGATG	CCACCTTAGA	AGACCTGGAT	AATTGTGACA	180
ACTATGAAAA	CATACCTGTT	GATAAAGTTG	AGATTGAAAT	AGCCACAGTG	ATGCCCTTCAG	240
GGAACAGAGA	GCTCCTCACT	CCACCCCCAC	AGCCTGAGAA	GGCCCAGGAA	GAGGAAGAGG	300
AGGAGGAATC	TACTCCCAGG	CTGATTGATG	GCTCTTCTCC	CCAGGAGCCT	GAATTCACAG	360
GGGTCTTGGG	GCCACACACA	AATGAAGACT	TTCCAACCTG	TCTTTTGTGT	ACTTGATATA	420

GTACCACCGT GACTGTGAT GCCCATGAAC TCGAG

455

(2) INFORMATION FOR SEQ ID NO:239:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 431 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC AAAGAGGCCT AGGGGGGTGA TGGTGTGTGC TTTGGACTGT GTGCCTACAG	60
GGTTTTTTTG TTTGTTTTG TTTTACTGTA ATGGAAATGG GTTTAGGATA AGCATACTCA	120
AAGCTCCACA GTGTATCCTT GAGCTTTCCA TGACTGCCAG TTACACACTG GAGAGGGTTA	180
AATGAATCTT AAAGTGTTCA TGATTACTAT TAAATATCAT TATAAAACAA ATTCTTTCGG	240
GGGGGCACAA ATGCTAATAT GTACAAGAAA ATCTTAGACT TGAAAATATC TTTAAAATGA	300
AAATAACTTT TTTTTCAGC TGACTGTATT CACAACCTTG ATGGATGTTA CCAAAGGTCA	360
ATTTGAAAGT CACCTTCGAG ATTGCCAGA CCCTTGATA GGCTGGTGAG CACACGTTGG	420
CCAGCCTCGA G	431

(2) INFORMATION FOR SEQ ID NO:240:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 178 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

GAATTCGGCC TTCATGGCCT ACTACAATCC GTGGCTGCTC NTTCTGCCT ACTTTACTCT	60
CCCACTGAAG CAGGTTANCG TTGAAGGTGG TATGGAAAAG CCTGCATGCC TGTTC AATTG	120
TTTTGTTTCT TCTCCTTCCC CCTCCCCCTA CCTCCTTCCC CTACCTCCTT CGCTCGAG	178

(2) INFORMATION FOR SEQ ID NO:241:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 232 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

GAATTCGGCC TTCATGGCCT ACATCAACAG CATCAAGTCC AGACTAAGCA AAAGTGGGCA	60
CATACAAACT CTGCTTAGAG CATTGAAGC TCGTGATCGA AACATACAAG AAAGCAACTT	120
TGATAGAGTC AATTCTGGT CTATGGTTAA TTAGTGGTC ATGGTGGTGG TGTCAGCCAT	180
TCAAGTTTAT ATGCTGAAGA GTCTGTTTGA AGATAAGAGG AAAAGTCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:242:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 195 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```
GAATTCGGCC TTCATGGCCT ACAAACCTA ACTTGCGCAG AAAACAAGAT GAGATTGGCA    60
TGGCTTTAT TGTTTTTTT GTTTGTTTT GGTTTTTTT TTTTTTTGG CTGACTCAG    120
GATTAAAAA CTGGAACGGT GAAGGTGACA GCAGTCGGTT GGAGCGAGCA TCCCCCAAAG    180
TTCCTGCGGC TCGAG                                         195
```

(2) INFORMATION FOR SEQ ID NO:243:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCC TTCATGGCCT ACATATCCTC AAATGGTAGT CATCTGGGGA CTAAGCAACA    60
GGTGTTCCTA GGAATAATT CTCTGGGTTT GAAAAGTTCA CAGTCTGTGC AGTCTATTGC    120
TCCTCCATAT AACCGAGCAG TGTCTCTGGA TAGCCCTGTT TCTGTTGGCT CAAGTCCTCC    180
AGTAAAAAAT ATCAGTGCTT TCCCCATGT ACCAAAGCAA CCCATGTTGG GTGGGAATCC    240
AAGAATGATG GATAGTCAGG AAAATTATGG CTCAAGTATG GGAGACTGGG GCTTACCAA    300
CTCAAAGGCC GGCAGCGGAC TCGAG                                         325
```

(2) INFORMATION FOR SEQ ID NO:244:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 342 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGGAGGCTAT TTAGGATTT CAATGAGAAG CAAAATCATA    60
TCCAAATCAA AGTAAAGGTC ATCGGTGGCC AATGAAGAGC GGAGAAAACG GAGGCGGGAG    120
AACAGACGCG ACCTCAAGAC AGAAGAATGG AAGACGCAAC TTCAAGAAA AGAGGAACTG    180
AAACGAAAAG AGAGGCACAG TCCAAATGAG GAAGAGAACA AGGAGCCTTC AGTCTCCTGG    240
GGGCCAGGGA GCCTCGCCAC GCGGTCACAG GTACACGGGG ACATTAGAG GCCATCTCCT    300
TTAAAGCCAG ACATTCTTCT TACTGGAATC TAGGCCATGA AG                                         342
```

(2) INFORMATION FOR SEQ ID NO:245:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 373 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

GAATTCGGCC TTCATGGCCT AGGCGGGTGA CATTTCAGCCG GCGGTTTCGGG GGGACGGANT	60
CTCCATTCCA GAACCATGGC CCAATTGTGC CGTAACCTTG TGGAGAAGAC CCCGGCGCTG	120
GTGAACGCTG CTGTGACTTA CTCGAAGCCT CGATTGGCCA CATTTTGGTA CTACGCCAAG	180
GTTGAGCTGG TTCCTCCAC CCCTGCTGAG ATCCCTAGAG CTATTTCAGAG CCTGAAAAAA	240
ATAGTCAATA GTGCTCAGAC TGGTAGCTTC AAACAGCTCA CAGTTAAGGA AGCTGTGCTG	300
AATGGTTTGG TGGCCACTGA GGTGTTGATG TGGTTTATG TCGGAGAGAT TATAGGCAGG	360
CGGGTCACTC GAG	373

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC TTCATGGCCT AAACAGGACC TGCTTCACAC CACCAAGCAT CAGGATGTGT	60
TGCTCAGTGA GCAGACCCGA CTCCAGAAGG ACATCAGTGA ATGGGCAAAT AGGTTTGAAG	120
ACTGTCAGAA AGNAGAGGAG ACAAACAAC AACAACTTCA AGTGCTTCAG AATGAGATTG	180
AAGAAAACAA GCTCAACTA GTCCAACAAG GAAATGATGT TTCAGAGACT CCAGAAAGAG	240
AGAGAAAGTG AAGAAAGCAA ATTAGAAACC AGTAAAGTGA CACTGAAGGA GCAACAGCAC	300
CAGCTGGAAA AGGAATTAAC AGACCAGAAA AGCAAACCTGG ACCAAGTGCT CTNCAAGGT	360
GCTGGCAGCT GAAGAGCGTG TTAGGACTCT GCAGGAAGAG GAGAGGTGGT GTGAGAGCCT	420
GGAGAAGACA CTCTCCCAA CTAACCGCA GCTTTCAGAA AGGGAGCAGC AATTGGTGGG	480
GAAATCAGGT GAGCTGTTGG CCCTCACGCT CGAG	514

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCC TTCTGGCCTA GGA CTCTATA GAACCCACTG CCTCCTGATG AAGTCCCTAC	60
TGTTCAACCCT TGCAGTTTTT ATGCTCCTGG CCCAATTGGT CTCAGGTAAT TGGTATGTGA	120
AAAAGTGTCT AAACGACGTT GGAATTTGCA AGAAGAAGTG CAAACCTGAA GAGATGCATG	180
TAAAGAATGG TTGGGCAATG TGCGGCAAC AAAGGGACTG CTGTGTTCCA GCTGACAGAC	240
GTGCTAATTA TCCTGTTTTT TGTGTCCAGA CAAAGACTAC AAGAATTTC ACAGTAACAG	300
CAACAACAGC AACAACAAC TTGATGATGA CTACTGCTTC GATGTCTTCG ATGGCTCCTA	360
CCCGTTTCTC CCACTGGTTG AACATTCCAG CCTCTGTCTC CTGCTCTAGG ATCCCCACGC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs

- (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

```
GAATTCGGCC TTCATGGCCT ACAAAGGAA AGAAGAAAAA GGGCCAAAAG CAAAAATGAA    60
ACTGATGGTA CTTGTTTCA CCATTGGGCT AACTTTGCTG CTAGGAGTTC AAGCCATGCC    120
TGCAAATCGC CTCTCTTGCT ACAGAAAGAT ACTAAAAGAT CACAACCTGC ACAACCTTCC    180
GGAAGGAGTA GCTGACCTGA CACAGATTGA TGTCAATGTC CAGGATCATT TCTGGGATGG    240
GAAGGGATGT GAGATGATCT GTTACTGCAA CTTACAGCGAA TTGCTCTGCT GCCCAAAGA    300
CGTTTTCTTT GGACCAAAGA TCTCTTCGT GATTCTTGC AACATCTCG AG              352
```

(2) INFORMATION FOR SEQ ID NO:249:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```
GAATTCGGCC TTCATGGCCT ACACAATGGT GTTCGCATTT TGGAAGGTCT TTCTGATCCT    60
AAGCTGCCTT GCAGGTCAGG TTAGTGTGGT GCAAGTGACC ATCCCAGACG GTTTCGTGAA    120
CGTGACTGTT GGATCTAATG TCACTCTCAT CTGCATCTAC ACCACCACTG TGGCCTCCCG    180
AGAACAGCTT TCCATCCAGT GGTCTTTCTT CCATAAGAAG GAGATGGAGC CAATTTCTAT    240
TTACTTTTCT CAAGGTGGAC AAGCTGTAGC CATCGGGCAA TTAAAGATC GAATTACAGG    300
GTCCAACGAT CCAGGTAATG CATCTATCAC TATCTCGCAT ATGCAGCCAG CAGACAGTGG    360
AATTACATC TCGATGTTA ACAACCCCCC AAGACTCGAG                          400
```

(2) INFORMATION FOR SEQ ID NO:250:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 278 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```
GAATTCGGCC AAAGAGGCCT AAGAGATTCA GGACCTGCAG AGTCGCCAGA AGCATGAAAT    60
TGAATCTTTG TATACTAAAC TGGGCAAGGT TCCCCCTGCT GTCATTATTC CCCCAGCTGC    120
TCCTCTGTCT GGGAGAAGAA GGAGACCCAC TAAAAGCAAA GGCAGCAAGT CTAGTCGCAG    180
CAGCTCATTG GGCAATAAAA GCCCAGAGCT TTCAGGCAAC CTGTCTGGTC AGAGTGAAC    240
TTCAGTCTTA CACCCCAAC AGACCTCCA CAGTCGAG                          278
```

(2) INFORMATION FOR SEQ ID NO:251:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 187 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

GAATTCGGCC TTCATGGCCT AGTTTATATA CTTTCTCTGA AGGATCCTAA TGATAGTTAA	60
CCATTCTCA TTTTATTTT GCTGGATTGT TTTCTGTTTT TTGCTTCAGC ATTCTTGCTT	120
TTGCTGTGCT TACTTTTGA GTTTTGATTG CCTGTGTCAC TGTTTCTTT CGCATCCACC	180
ACTCGAG	187

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

GAATTCGGCC TTCATGGCCT ACTTCTCTGG AAAGGTCAC TATTGTTGT TTTTCGAGA	60
CAGGGTCTCG CTCTTCACCC AGACTGCAAT GCAGTGGCAC AATCATAGCT TATTGCAACC	120
TCAAACCTCGT GGGCTCAAGC AATGCTCGCT CCTCCCAAGT AGCTAGGACC ACAGGCATGC	180
ACCACGATGC CCACCTAGTT TTTTGTATTT TCTATAGAGA NGGGGGTCTC ACTGTGTTTC	240
TCAAGCTGGT CACATACTCT TGGCCTCAGG CAGTTCTCCC ACATCAGANT CTCAAAGCAC	300
TGGGCTTACA GCTGNGAGCC NGNCCTTTT AAAAAAAAAA AAAAAATCAA AACAAAACAA	360
AACAAGATTA TGTCTTCCC ACGCATCTCG AG	392

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT	60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA	120
AAAAGTGTC TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAGTAA ACAATGAGAA	180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA	240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA	300
CACCATCTGT GGGACTCGAG	320

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

( SEQUENCE DESCRIPTION: SEQ ID NO:254:

GAATTCGGCC TTCATGGCCT AATCAGAAGC TTTTCAAAT TCCGTCTTCA AGAAGAAACA	60
CCCGTGGAGG AAGAAGACAT TATACAAAAC AAATTTAGAA ACTGGGATCA TGAGTGGAAA	120
AACAAAGGCA AGAAGGGCTG CCATGTTTT TAGACGTTGC TCTGAAGACG CCAGCGGTAG	180
CGCCAGTGGC AATGCTTTGT TATCAGAGGA CGAAAATCCT GATGCCAATG GGGTAACTCG	240
ATCATGGAAG ATTATTCTAA GTACAATGCT TACACTGACT TTTCTTCTTG TAGGACTCCT	300
AAATCATCAG TGGCTTAAAG AAACAGATGT TCCTCAGAA TCCAGACAAT TATATGCCAT	360
GCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

GAATTCGGCC TTCATGGCCT AAAGTAGTTC TGTTATAAAA AGCCAGGAAT CCTAAAACCA	60
AAATATTAGA ACGAAAACAG AAACATGGCT CACTATATTA CATTTCTCTG CATGGTTTTG	120
GTGCTGCTTC TTCAGAATTC TGTGTTAGCT GAAGATGGGG AAGTAAGATC AAGTTGTCGT	180
ACTGCTCCGA CAGATTTAGT TTTTCATCTTA GATGGCTCTA ATTGTGTTGG CCCAGAAAAC	240
TTTGAAATAG TGAAAAAGTG GCTTGTCAAT ATCACAAAAA ACTTTGACAT AGGGCCGAAG	300
TTTATTCAAG TTGGAGTGGT TCAATATAGT GACTACCTG TGCTGGAGAT TCCTCTCGGA	360
AGCTATGATT CAGGAGAACA TTTGACGGCA GCAGTGAAT CCATACTCTA CTTAGGAGGA	420
AACACAAAGA CAGGAAGAA CCTCGAG	447

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

GAATTCGGCC TTCATGGCCT AAATGAAGCA AAATTCCATA CATCATTTTG AAAATAGTGT	60
TTCTTTCCCT GATAGGCCTG TTCTGCATCA TTCTTTTAGC TTCCTTCTGC CCTGTTTATC	120
ACTTGGTCCC ACTTTTATAT TTTTCCTCTT CGGTCCAGAA TTTCTTATTT AGTTTCTTGT	180
ATTTTGCCTA CTCCCTCCCT TCTCCATGAT TCAGCCTAGT CTTTCCGTCC TCTGTGGACT	240
TGGGTGTGCC TTCCTCTGGG CCACCTCGTC TTTTGCTGCT GTTAGCCCTC CCGCCTGCGC	300
ACCTGCCACT TCACCCTCGC CTGTGGTCCA CTTACGTTCC ACTCAGCCCG GTCAGTCCTG	360
CTTTGTTCTT CTCCACCGCC TAGGTCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAATTTAAGT TCCAGTATGA GATCTTCAAA GCTGTCTTTT TTTTCTTC TTCCGTTCTC 60
AGATCCTGAG 70
```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```
GAATTCGGCC AAAGAGGCCT AGTCAAATTC TTACCTCGCT CTTTCACTGC TAGTAAGATC 60
AGATTGCGTT TCTTTCAGTT ACTCTTCAAT CGCCAGTTTC TTGATCTGCT TCTAAAAGAA 120
GAAGTAGAGA AGATAAATCC TGTCTTCAAT ACCTGGAAGG AAAAACAAAA TAACCTCAAC 180
TCCGTTTGA AAAAACATT CCAAGAACTT TCATCAGAGA TTTTACTTAG ATGATTTACA 240
CAATGAAGAA AGTACATGCA CTTTGGGCTT CTGTATGCCT GCTGCTTAAT CTTGCCCCTG 300
CCCTCTTAA TGCTGATTCT GAGGAAGATG AAGAACACAC AATTATCACA GATACACTCG 360
AG 362
```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```
GAATTCTAGA CTGCCTCGA GTGCGGATCC AGCCGGAGGC GAAGAGAAGC ACTTTGGGGG 60
CAAAAGAAGA GAAAAATGAA GACGGGACAT TTTGAAATAG TCACCATGCT GCTGGCAACC 120
ATGATTCTAG TGGACATTTT CCAGGTGAAG GCTGAAGTGT TAGACATGGC AGATAATGCA 180
TTTGATGATG AATACCTGAA ATGTACGGAC AGGATGGAAA TTAAATACGT TCCCCAAGT 240
CTAAAGGAGG AAAAAGCAAG CCACCAGCAA TTAGATACTG TGTGGGAAAA TGCAAAAGCC 300
AAATGGGCAG CCCGAAAGAC TCAAATCTTT CTCCCTATGA ATTTAAGGA TAACCATGGA 360
ATAGCCCTGA TGGCATATAT TTCCGAAGCT CAAGAGCAAA CTCCCTTTTA CCATCTCTTC 420
AGTGAAGCTG TGAAGATGGC TGGCCAATC GAG 453
```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC TTATGGCCTA CTTTAAAAAA AAACCAATAC CAAAGAAGCC TACAATGTTG      60
GCCTTAGCCA AAATCTGTT GATTTCACG TTGTTTATT CACTTCTATC GGGGAGCCAT      120
GGAAAAGAAA ATCAAGACAT AAACACAACA CAGAACATNG CAGAAGTTT TAAAACAATG      180
GAAAATAAAC CTATTCTTT GGAAAGTGAA GCAAACTTAA ACTCAGATAA AGAAAATATA      240
ACCACCTCAA ATCTCAAGGC GAGTCATTCC CTCCTTTGA ATCTACCCAA CAACAGCCAC      300
GGAATAACAG ATTTCTCCAG TAACTCATCA GCAGAGCATT CTTTGGGCAG TCTAAAACCC      360
ACATCTACCA TTTCCACAAG CCCTCCCTTG ATCCATAGCT TTGTTTCTAA AGTGCCTTGG      420
AATGCACCTA TAGCAGATGA AGATCTTTTG CCCATCTCCC TCGAG                      465

```

## (2) INFORMATION FOR SEQ ID NO:261:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```

GAATTCGGCC TTCATGGCCT AGCGGCGGGG CGAGCGCCTC CACGCAGCAA CTCCGGAGTC      60
CCCCGCTTGC CCGAGCGCAG TTTCTCCGCT GCTGTTTCCA CCGGCTTTGT AACACTGGGA      120
ATTTACATCC TCACCCGCAC CCCTCAGGCC CGAGGATTTT AAACCTCACCT TTACTCTCGA      180
ACTGAGAGTT GCGGTAGATG GGATTTTGC CTTTCCCCCA GATGGTTGAA GGTTAAGATT      240
TTTGAAACC CCCCCACCTC CTTATTCTTA TTATTATTC TGCNAGAAAA GTATAAAGAG      300
AGTTGTAGTG GAGGTGAGAT TTGTGATCGG GAAAGCCTTC GACTCCCTCC TTCTCCGTCT      360
TCCGCTTCTC TCTCTCTGAT TAGTTCCTAT CCAGCAGCAG ATTGAAGCAG GAGATGATTC      420
TTCTCAAGGT TTGTTTCAGCA GCTTCACTTC TAGGCGAAGG CTTATGAAC CAAGTGACGA      480
ACAACCTCGA G                                     491

```

## (2) INFORMATION FOR SEQ ID NO:262:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```

GAATTCGGCC TTCATGGCCT ACATTTTCTT ATTGATATAA AAATGTTAG AGAAATATAC      60
AGTTGTATAT TTCCCCCTT TATACAGAAA TTTTACAATA ATTCAGATT TTTCTGAGTT      120
TTTTAGATT TTTGATTCTA TAATATGAGA TTATTCTTTC TTCCTCTTAT TTTTGTAGGT      180
TATTTATTTT TTCTTTTCTT TTTAATTGTC TCATACAGGT TTACTCTCGA G              231

```

## (2) INFORMATION FOR SEQ ID NO:263:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

GAATTCGGCC	TTCATGGCCT	AGTAAAATTT	AAAATACATA	CTAACATATA	ACCCAATTTT	60
AACATATTAA	GTGAATATGT	ATTCTTAAAA	GATCCACTAC	TTTACATTTA	GATGCGTTAG	120
GATGTATTAG	AAATAAAAAC	AGAAGAAAAG	ATTTAGAATC	TAGTCTGTCT	TTGCCACTCA	180
AGCTAGTTAC	CCTCTCTGAG	TTTTATACCC	CCTTCATCTA	TTAAAATGGG	GGGTAACGCC	240
AACCTGACTC	CTTTAAAATG	AGTTTGAGAG	TCAGGCAAAT	TAGAAAGATA	CATAGATGAA	300
AACCTTTTAA	AAAGTATATA	GTCTTTCATG	ATTTGTAGAA	CACCTTTTATA	CTTTTCAGAG	360
TACTTTTACA	TTGATCATAT	TGTTTGACT	TTATGAAAGT	CTTCTACAAA	TCAGAATTAT	420
GCTTATTATA	CAGATGTGGC	TCGAG				445

## (2) INFORMATION FOR SEQ ID NO:264:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

GAATTCGGCC	AAAGAGGCCT	AATTACTTTA	TATTTTAAAA	GCTCTGTGAC	TTCAGTAGTG	60
CATTGAAATA	AAATTTTAT	TCATTATGAG	AGAGTCTGTG	AGGAACAGAA	TCATGGTTCC	120
TGTGTGTTTG	AAGATATGCG	GTGGGGTGAT	AGTGCTGGCA	GCAGCTCTGT	TGCTCTTGTG	180
CCCATGGCAT	ACAGACTGGA	TCTGCTGGTC	CACGGCTCCT	GAGGTTAATG	TCCAAGCCCT	240
CTGCAATGCT	GACAGTCTTC	CTCATCCTCA	CACCCTACCT	CTCAGTTTCT	ACCTGCCACC	300
TCCCAGTAA	TATTAGCCTC	TTGAGTCCCC	AACAACACTC	GAG		343

## (2) INFORMATION FOR SEQ ID NO:265:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

GAATTCGGCC	AAAGAGGCCT	ATTAAAATTC	ATTTATCAGT	AGGATCATTC	TGTTCTAGAC	60
AAGTTGGCTA	TATTATAAAA	CATTAAGCAA	GCAGGCACTA	AGTTAAATAT	TGTAGCAGTT	120
GAAATTTAAT	GCTAATCTTA	CAGTTTTACA	CAGTTAACAA	TCTAGGCCAA	ATCTATTGAT	180
ACCTTTGGAA	CTACCCTTTA	AATTCCATCC	TATGCTTGTG	AAAAGGTTGC	ATATAATTTT	240
TTTTCTTTT	TCTCTCTTCT	CTTCCTCTTC	TTTTTTCTTT	TTCTTTTCT	ATTTCCCTTT	300
TCTTCTTTT	TCTTTCACAG	AGTCTTGGA	TATCACCCAC	ACTCTCGAG		349

## (2) INFORMATION FOR SEQ ID NO:266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCG AAAGAGGCCT AGAATAAAAA TGCTTGTGTC AATTCAA ACATTTGTCT    60
CTTTCCTTC CATTCCAGTT CTAGGTCTCG TTCCAGATCA TATTCTCCAG CTCATAACAG    120
AGAAAGAAAC CACCCAAGAG TATATCAGAA TCGGGATTTC CGAGGTCACA ACAGAGGCTA    180
TAGAAGGCC TATTATTTC GTGGCGTAA CAGAGGCTTT TATCCATGGG GCCAATATAA    240
CCGAGGAGGC TATGGAACT ACCGCTCAA TTGGCAGAAT TACCGGCAAG CATAAGTCC    300
TCGTCGAGGC CCTTCAAGAT CCCGGCTCCC TCGAG                                335

```

## (2) INFORMATION FOR SEQ ID NO:267:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC AAAGAGGCCT AGTGGAAATT TGTGGCTAGT GTGATTTTGT TTTGTTTCCT    60
TTTAAGTACT GTTGATCAGT TGTGACACTT ACTGGTTAAA CTTACGTTGC TAAAGATTTC    120
TCTATAATAA GCCACACATT ATATTAGAC TATATTAAGG GACCTTGGTT TTCTTCTAGA    180
TAGCAGCTGT CCCAAAGAAA ATATTCTTC TTTGTCTGTT AAGATTTAGC TATTATCTGC    240
CAGTTGTAA GAGGTTTGG TTCCAACTC AACCAGCAAT GTTGAGAGCT GAACTTAAGA    300
TAGCTGTGT ACTTTTGTCT TTCCATCTGT TACTGTCCTT CATTCTTGGC TCCCTACTAT    360
CTATAAACAG CAAGCTCGAG                                380

```

## (2) INFORMATION FOR SEQ ID NO:268:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC AAAGAGGCCT ATCTAGACCT GCCTCGAGTC AGCAACAACA ATTTTAAAA    60
TTTCTTTCTG GATTCTAGAG TGAGTTTTT TCATAACACA AGAGGATAAG AGTGAGGACA    120
ACAGGAGGTA TTGATGATCT GCTGAGCACC AGGCATTATG CTAAGTGCAT TCACACACAT    180
CTCAGTGCCT ATTGCCTCGT TGTGGACTTC TCTATCCCAG CTCGTCCCC TGGCAAATTC    240
TTTCTCATCC TTCAACTCTC AGACACCTCC CCCGCGCCTC GAG                                283

```

## (2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 157 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```

GAATTCGGCC AAAGAGGCCT AACCAGGCAT TTTTCATTAG GGTTCAGGT CCAGGTGAAT    60
TCTTGAGTTG GTTCGTTGTG TCATGTATTG GCCTTTAATA ATGCTCTTAT TTTGGCCAC    120

```



GCCTGTGGTC CACTTT GGGAGGCTGG TCTCGAG

157

## (2) INFORMATION FOR SEQ ID NO:270:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GAATTCGGCC AAAGAGGCCT AACCAGGCAT TTTTCATTAG GGTTCCTAGGT CCAGGTGAAT 60  
 TCTTGAGTTG GTTCGTGTG TCATGTATTG GCCTTTAATA ATGCTCTTAT TTTGGCCAC 120  
 GCCTGTGGTC CCAGCACTTT GGGAGGCTGG TCTCGAG 157

## (2) INFORMATION FOR SEQ ID NO:271:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GAATTCGGCC AAAGAGGCCT ACCCAAATAA AATCAGAGTC AGAAATGGAA ACAGACAGTG 60  
 GAGTACCTCA AAACACTGGA ATGAAAAATG AAAAAACAGC CAACAGGGAA GAGTGTCGCA 120  
 CCCAGGAGAA AGTTAATGCA ACAGGACCAC AGTTCGTGAG TGGAGTGATT GTGAAGATCA 180  
 TTAGCACAGA GCCTCTACCT GGCAGGAAAC AAGTCCGGGA TACTTTGGCA GCAATCTCAG 240  
 AAGTTCTTTA TGTTGATTTG CTAGAAGGGG ATACAGAATG CCATGCTAGA TTTAAACTC 300  
 CTGAGGATGC TCAAGCAGTA ATAAATGCCT ATACAGAAAT TAACAAGAAA CACTGCTGGA 360  
 AACTCGAG 368

## (2) INFORMATION FOR SEQ ID NO:272:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

GAATTCGGCC AAAGAGGCCT ACAACGAACG GCTTGGGNGC GGACTGGTAT CCGGGGACTG 60  
 TGACTTGCGAG GGTCCGCCAT GGAGCCAGAG CAGATGCTGG AGGGACAAAC GCAGGTTGCA 120  
 GAAAATCCTC ACTCTGAGTA CGGTCTCACA GACAACGTTG AGAGAATAGT AGAAAATGAG 180  
 AAGATTAATG CAGAAAAGTC ATCAAAGCAG ANGCTAGATC TCCAGTCTTT GCCAACTCGT 240  
 GCCTACCTGG ATCAGACACT TGTGCCTATC TNATNACAGG GACTTGCTGT GCTTGCCAAG 300  
 GANAGACCAC CACATCCCAT TGAATTCTA GCATCTTATC TTTTAAAAA CAAGGCACAG 360  
 ACTCGAG 367

## (2) INFORMATION FOR SEQ ID NO:273:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 250 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```
GAATTTGGGT CCTAGGATAT AAATATTTT CCCTTTATAA GATATTIATA GGATATTGCA    60
AACAAATTCT GTTTTTTCAT ATCCTTGCCA GCAGTTAGGG TTATCAAATT CTTTGATTTC    120
TTACTGATTT GTAAGTTTTT TTGTTTGT TTAGGTATTT TCAGGATAGT TACAAATGTT    180
AGGAAAACCT ATTTTATTTT GGCTTTTGAA GTTCCAGAT TTCTTGAACA GTGACCAATA    240
TGGACTCGAG                                250
```

(2) INFORMATION FOR SEQ ID NO:274:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

```
GAATTCGGCC AAAGAGGCCT ATCTTTTTTC CTCTTTTTTT GTTGCAGAAA TGATAACCTA    60
CTATTCACTA TTCTGTGCCT TGCTTTGTTT GCATACTGAA AATTATCCAT GGAAGGATAC    120
AGCACCCTC GAG                                133
```

(2) INFORMATION FOR SEQ ID NO:275:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 396 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

```
GAATTCGGCC AAAGAGGCCT AATGAAACAT TTCTGTAACC TGCTTTGTAT CTTGATGTTT    60
TGTAATCAGC AAAGTGTATG TGACCCGCCT TCACAAAATA ATGCAGCAAA TATTTCCATG    120
GTTCAAGCTG CTTCAGCAGG ACCCCCATCT CTGAGAAAAG ATTCGACTCC AGTTATAGCC    180
AATGTAGTAT CATTGGCAAG TGCCCCTGCT GCTCAGCCTA CAGTGAATTC TAACAGTGTC    240
TTACAAGGTG CAGTTCCAAC AGTAACAGCG AAAATCATCG GTGATGCAAG TACTCAAACA    300
GATGCCCTGA AACTGCCACC TTCCCAACCT CCAAGGCTTT TGAAGAACAA AGCTTTATTA    360
TGCAAACCCA TCACACAGAC TAAAGCCACA CTCGAG                                396
```

(2) INFORMATION FOR SEQ ID NO:276:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 391 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

```
GAATTCGGCC AAAGAGGCCT ACCCTCCCC ATTTCTAGTT TCATGAACTG TGCACAGGGA      60
TATGGGGCTG TTCGAGGTAC TTTTGGGCTG ACCAAGGCTC AGAGGCTACT GACAGCTTTG      120
CTGCAAGTAA CTTCTAGGCC TTGTGGGTCC CAGTGCAGGG AACCCATGTG CGGTGACACT      180
GGAGAAGCCA TCTGATCCAG GTCTCTCACT TGACAGATGG GGAAACTGAG GTCCAAAGAG      240
GTACAGCAGC TTGGTTTAAG AGATAGAGAT GGAAGTGGAA CAAAAATAAT AACCATTGTA      300
TAATATTTTA ACATTATTG ATTTGTTTTT ATATGCCAAG ACCTTTTAAA GCATTATCTC      360
CTTTAAACTC TCATAACCAC TCTTACTCGA G                                     391
```

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```
GAATTCGGCC AAAGAGGCCT ACTGCTTCCT GATCATTGT CTTTTTAAAT AAAAATATGA      60
TATTGAGAT TCTTTTATTC TCTTTAAATA TTTGAATACA GAGTCTATTT GAAGGACCAG      120
TATATTGAAT AGCAGTAATA TTTGAAGGAC TAGTCAGCTG TAGAAGCCTT GACTTCAGAT      180
CTTCACCCAA GAAACTCTGT GTATTTGCTT TTCCTGGGCC ACTCAGATAG ACAATTGTGT      240
TTTNGATACA GTAAGAGTTT GCAGCTTAGC TTAAGTAGAA ATAATCCGGA TGCCTCGAG      299
```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```
GAATTCGGCC AAAGAGGCCT ACTAGGATTT GAGGAGGACG CCTCTTTTGC AGGAGGATGC      60
AGTGAACAGC CAAAGTCATC TGACATCCTT TTCCATCTTT TTCCTTCTAG TATCCCAGTT      120
TCAAGGCCCA GGAAAGGCAG GGAATAACAT ATGGAGCAGT TACCCAGAG TTCAAAGGGT      180
TAATCTCTAA GAATTCATTC TCTGACACCA GCCACAGCTC TTGTCCCAT CTCTGGGACC      240
GTCCCCTCTG AGCCCCAGGT TGGCAGCTTC CCTGAATTCC TTCTATGATA TAATTTGTAA      300
TTCGGCAGGG CTCTGGGACC CAGGCTCAGA GACCCAGGCT CTGCTCTCTC CTCAGTTTCC      360
AGGAGTCAGG GCTTGCTCTA AGGGAGGAAG TAAACAGGCC TTTCCCTTGC TCCCTCTCCT      420
TTTCCTCGAG                                     430
```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) LECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GAATTCGGCC	AAAGAGGCCT	AGTGGGAGTT	AGATGTATTA	TATAAAAATG	TCCCCAGCAT	60
CAAAATGACT	CAGAGTATGA	CTGTATTTTT	AAATTAAATA	TCAAGACCTA	TCATCTGACA	120
AAACATATGA	ATGACAATGA	GATATAATAT	TTGAAATTAG	ATCCGTTCTG	GGGAATCAAA	180
GATATTTTGT	AACAGTATAC	ACAGTAGGCA	TTGGTAAGTA	AATGAGAACT	CTATGAGCTG	240
TTTTCTGGAA	AAGTTTAAAA	TGAAATTTGT	CAAATATCAA	ATGATTGTTA	TAAGAAAATC	300
AGTGGAGGCA	GTATCCTTGG	AAAAATCCAG	AAACAGTTTT	GTNTGTTTGT	TGTTTTTTAC	360
ATCAAGGCAG	ATCAGCAGGT	GAACAGCTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GAATTCGGCC	AAAGAGGCCT	AGAAGAACT	TTTTCTTGGG	AGCAAGGTAG	TTATTTCAAA	60
GCACAGAAAA	AGGCGGCGGG	GGGCACAGAG	AAGCACAGAG	AAGCGGGGGC	AGTTGCTCAG	120
GTAAACATT	CATCTTGGCT	TTTCTTTTAA	AAAGATAAAC	TTTGTCCAC	GTAAAGAGGA	180
AAACTGCATA	GATATTCATT	GAGATTATCT	GATTTGTCAC	TGTGCCAAA	GAAAAAACAA	240
AGGTAAATA	CACGAGTTTC	TGCATTCAGA	AGAAAGTATT	TCAGGTAAAA	ATTAACATT	300
AAGCAACTTT	TCTCAGCAGA	AGAAATGCCC	AAATCTTAA	GGACAGTACT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GAATTCGGCC	AAAGAGGCCT	ACTTTGAGAT	TTTTTTGTTG	TGTTTCCTT	TTTGTATTTT	60
ACTGATATCA	CCAGGATAGT	TTACTCTCCT	TCTAGCTTTC	TGCTIACCGC	ACACTGGATG	120
ACACACACAT	ACACACCCGC	AAAAATGCTC	ATGAACCCAA	TCCGGAGAAG	GTTCCAGCAG	180
GTCCCCCACC	CTCCCCCTCCT	CGTCTACTT	CTCCTCTTGA	CAGCGAGGAC	AGGAGGGGGA	240
CAAGGGGACA	CCTGGGCAGA	CCCGCCGGGT	CTCCCCCAC	CCCACCCGGC	CCTCANATCA	300
TACTCGAG						308

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GAATTCGGCC AAAGAGGCCT AGACCTGCCT TGTGTTTTCC ACCCTGAAAG AATGTTGTGG	60
CTGCTCTTTT TTCTGGTGAC TGCCATTCAT GCTGAACTCT GTCAACCAGG TGCAGAAAAT	120
GCTTTTAAAG TGAGACTTAG TATCAGAACA GCTCTGGGAG ATAAAGCATA TGCCTGGGAT	180
ACCAATGAAG AATACCTCTT CAAAGCGATG GTAGCTTTCT CCATGAGAAA AGTTCCCAAC	240
AGAGAAGCAA CAGAAATTTC CCATGTCCTA CTTTGCAATG TAACCCAGAG GGTATCATTC	300
TGGTTTGTGG TTACAGACCC TTCANAAAAT CACACCCTTC CTGCTGTTGA GGTGCAATCA	360
GCCATAAGAA TGAACAAGAA CCGGATCAAC AATGCCTTCT TTGTAAANGA CCAAACTCTG	420
GAATTTTAN AAATCCCTTC CACACTTGCA CCACATCTCG AG	462

## (2) INFORMATION FOR SEQ ID NO:283:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 240 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

GAATTCGGCC AAAGAGGCCT AGCAGATTCT TAATTTCCCT GTCCATATTT TCCCCTTTCC	60
TTTCTCCCTG CCCGTTCCAT GGTCTTATCT GGCTGCTTTC TCAATTTATT CTTGTTGCT	120
TGTGGATTCC CTTCTATTAA TCTTGAAGTC GTTACTGACA TGTTGGGCC TATACCAGCT	180
AGACCATTGC CTGAAGACTT TTTGATGAAC AATCTGTGTA AAGAAAAAGG GAATCTCGAG	240

## (2) INFORMATION FOR SEQ ID NO:284:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

GAATTCGGCC AAAGAGGCNT ACCAGGANTT TCTATTCAAT TGAGAAGAAC CCAGCAAAAT	60
GGGGATCTCC ACAGTCATCC TTGAAATGTG TCTTTTATGG GGACAAGTTC TATCTACAGG	120
TGGGTGGATC CCAAGGACTA CAGACTACGC TTCCTGATT CCCTCGGAGG TGCCCTTGGA	180
TACAACTGTA GCAGAAGGTT CTCCATTTC CTCGGAGTTG ACCCTGGAGT CAACTGTAGC	240
AGAAGGTTCT CCGATTTCT TGGAGTCAAC CCTGGAGTCA ACTGTAGCAG AAGGTTCTCT	300
GATTCCTCA GAGTCAACCC TGGAGTCAAC TGTAGCAGAA GGA CTGAG	349

## (2) INFORMATION FOR SEQ ID NO:285:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

GAATTCGCC	AAAGAGGCCT	AAAAAATAA	GAAATAATCT	ATCCACATT	TAATAATTG	60
AATCTTCCTG	CTATAGATAT	TGGTTATCT	TGACTTTT	ANATAACATA	TTTCTACAGG	120
ATTTTGAGTC	TGAGAAGAGA	AAGGTAANAT	GCAAGACACT	TCGATTTGTT	GCACATTATT	180
ATGGAGCATC	ATTAATGGTT	TGNACATTTC	TTGTCCTTTG	GGCTTGAATG	GACAGTACCA	240
AAATTGGGGT	AATCAGCAAC	TTGATGCACA	GCTACGAGGA	ATAAATGCTT	TTGCTAATGC	300
ACTCGAG						307

## (2) INFORMATION FOR SEQ ID NO:286:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

GAATTCGGCC	AAAGAGGCCT	AAAAGATTAA	AAAAAAATTT	GTGTGATTG	ACTATATATT	60
AAAATCTCTT	TCATAATTAG	TCAACAATTT	AAGCAACAAT	TAAATTATTA	GTGCTGTGGA	120
AAATATAGAA	GAAAGATAAT	TTCTTATTC	CCTCCTGAGG	AAAGCATTG	ATACACCTGG	180
AAAGGAGCTG	CTATGAAGCC	AATTTATCTG	TTCTTTTAT	CAATTCAGCA	GCATTTAAGA	240
TCAGATTTT	TCTCTAGTGG	TCCAGCAGAG	GGAGCCCTAG	CACATGAATT	GTTTTCATTT	300
CGTGCTTGCA	CCCAGGATCT	CGAG				324

## (2) INFORMATION FOR SEQ ID NO:287:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GAATTCGGCC	AAAGAGGCCT	AAGAGAGATC	AGTAAAACCA	CTGGNAAAGA	AAAGATGGAG	60
AAAATGTTGG	AAAACCAGAA	CTGTNTGCTG	TCAAGNTCAT	GTGGAATGTT	CAAGAAAGAA	120
TCTGACTCTA	TTATCTAATA	TCTTACATAC	NTCCACCAGA	CTGGACTTGC	TATTTGAATT	180
TTAAGCAAGT	TTCTTTTCT	TTTATACAAA	TTGCAAATTT	CATATTTT	TAATCACATC	240
CTAGGAATAG	CACAATAATT	GGGAAATAGA	ACCCTTATCA	CTAGNAGAAC	CATTTTCCTG	300
CCACTCTCGA	G					311

## (2) INFORMATION FOR SEQ ID NO:288:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GAATTCGGCC	AAAGAGGCCT	ATGCCCCATA	AAAGGGCTCC	TGAAGCTCTT	TGTGAAGGGG	60
TCTGAAAAGG	GCAGATGAGG	GTGTCCTTTG	GGGCGGATGT	GGGGTTTGGG	ACAATTGCAT	120

```

GTGATTGTCA TCTTAGCT GTCTGCATCC CACAGAACT TTTT TCTTCCAGCT 180
GGCCCAAGTC CTGGGTCTCT TTTACTGTTT TTGTAGCTGA CTACAGTAGG CAGATGAGGA 240
ACTCTTAGTC AATCTGGAAA AACTCGACTG ACTATAAACA ATCCTAAATT GAAAGAAAGG 300
TCTCGAG 307

```

## (2) INFORMATION FOR SEQ ID NO:289:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

```

GAATTCGGCC AAAGAGGCCT AGCCGGTGTG GGGAGGATTG GCTCAGCCAC CCGCTGGGAA 60
TCGTGCAGGG ATTCTTCGCC CAAAATGGAG TTAATCCTGA CTGGGAGAAG AAAGTAATTG 120
AGTATTTTAA GGAAAAGCTG AAGGAAAATA ATGCTCCTAA GTGGGTACCA TCACTGAACG 180
AAGTCCCTCCT TCATTATTG AAACCTAATA GTTTGTGAA ATTTCTGTC ATGATTCAAG 240
ATATGTTTGA CCCTGAGTTT TACATGGGAG TTTATGAAAC GGTAAACCAA AACACAAAAG 300
CACATGTTCT TCATTTTGA AAATATAGAG ATGTAGCAGA GTGTGGGCCT CAACAAGAAC 360
TTGATTTAAA CTCTCCACGA AATACCACTT TGGAAAGACA GACTTTCTAT TGTGTTCCGG 420
TGCTGGGGA ATCTACGTGG GTAAAGAAG CCTATGTTAA TGCAAACCAA GCTCGAG 477

```

## (2) INFORMATION FOR SEQ ID NO:290:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 318 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

```

GAATTCGGCC AAAGAGGCCT AAAAAATCT TCTGGAATA ATTCTTAGCT GTGTAAGAAA 60
TTTGATACTT AAGGAGACAG CAGTGGAGTC ACTTAACTAA TTTGTGTTGG TTTTTCACCT 120
GCATAGTGAC TGCCATTTAC TTTTATGTTT TGGTCAATTA GATACTAAGT AAAAAGATAG 180
TTGGTATTTT GGCTTCAGAT CAGGTCTATT TCTCCAATT CTATATATCC TTTCTGTGAT 240
TAAACAAAT AAACAATCCT CAGTATCATC ATTTAACACC TCTAACTGAT AGAAAAAATG 300
AGGTTGTGGG TCCTCGAG 318

```

## (2) INFORMATION FOR SEQ ID NO:291:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 213 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

```

GAATTCGGCC AAAGAGGCCT AACCTTGGGA TTTTCTATAT ATATGATGGT CTCATTGTG 60
NATAAACACA ATTTATTTC TCCTTTCCA ATCTGGATGC TTTTTTTTT TNCCTATTGC 120

```

ACTGCCTT GCATTCTTAA AAATCCATT CCAATGTTCA AATGAAATGG TGAAAGTGGA 180  
 CATTGGAATG GAGTTTTTAG GAATGCACTC GAG 213

## (2) INFORMATION FOR SEQ ID NO:292:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 644 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAATTCGGCC AAAGAGGCCT AAAAAGAATT AACCAGCTCT TCAGTCAAGC AAATCCTCTA 60  
 CTCACCATGC TTCCTCCTGC CATTCAATTC TATCTCCTTC CCCTTGCAATG CATCCTAATG 120  
 AAAAGCTGTT TGGCTTTTAA AAATGATGCC ACAGAAATCC TTTATTACACA TGTGGTTAAA 180  
 CCTGTTCCAG CACACCCAG CAGCAACAGN ACGTTGAATC AAGCCAGAAA TGGTTGCAGG 240  
 CATTTCAGTA ACACTGGACT GGATCGGAAC ACTCGGGTTC AAGTGGGTTG CCGGGAANKG 300  
 CGNTCCCACC AAATACATCT CTGATGGCCA GTGCACCAGC ATCAGCCNTA NGAAGGAGNT 360  
 GGTGTGTGCT GCGGAGTGAC TTGCCCTGC CAGTGCTCCN TAATTGGNTT GGAGGAGGCT 420  
 GTGGAACAAN GTANTGGAGC AGGAGGAGCT CCCAGGNGTG GCGGTGTGTC AATGACAAAA 480  
 CCNGTACCCA GAGAATCCAG NTGCAGTTCC AAGATGGCNG CACACGCACG TACAAAATCA 540  
 CAGTAGTCGG TGCCNGCAAG TGCAAGAGGT ACACCCGGCA GCACANNGAG TCCAGTCACC 600  
 ANTTTGAGAG CATNTCACGT GCCAAGCCAG TCCAGCAACT CGAG 644

## (2) INFORMATION FOR SEQ ID NO:293:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 299 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

GAATTCGGCC AAAGAGGCCT ATTTNTGGAT GGTGCTAGCG AANTAGAGGC TAATCCCCAA 60  
 CATGAGGTTT TTCTAATTTT ANGTTGTGTA TTTTCCAGTG AAAGAAATNA ANAAGAATTT 120  
 GCAGATTCGT GGAGACTTGG GAAGGATATN AAGCTGTCCT ACAACCCAG ATTCACCCAA 180  
 AATTCAGCAA ATCACTGAAT ATTCNNAATA AAAATTGAAG TATTTTCNAA CTTCAGTTTT 240  
 TATCTCCAGA GGTNACGTC CNATGTAATC CGAAATCCTC ACGANGACAT AACCTCGAG 299

## (2) INFORMATION FOR SEQ ID NO:294:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 310 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

GAATTCGGCC AAAGAGGCCT ACAACAACAA CAAAGAAGA ATACTAATTA GAATTTGAGT 60  
 TCTAGGGGTT TTTCTAGGT TTTTCATTCT AGACTTAGCT TTTATTCAAA CTTGTTGATC 120



```

CTGCATAGGG GCTCTAGC TTAAAAAAT AAAACAATAA ACATAA A GCCTATTGAG 180
TTCAATCAGA GTAGGGAGCA GTTTTATTGA ACAGCACATT TTCAAATCT TCAGTTGTGT 240
TTTGTTTTTC AGCTACGTGT CTCTCTGTGA TAATGAAAAG ACAGGTTGCA AAGCCCGGA 300
TTCGCTCGAG 310

```

## (2) INFORMATION FOR SEQ ID NO:295:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```

GAATTCGGCC AAAGAGGCCT ACATCTATTG AGGAAAACCA CAAAAAATT CAAAACAGCT 60
ACAACGGGAA AAAGAGAGTT TTGTCCACA GTGAGCAGGC CACTAGTTTA TTAACCTCCA 120
GTCACTTGA TTTTGCTAA AATGAAGACT CTGCAGTCTA CACTTCTCCT GTTACTGCTT 180
GTGCCTCTGA TAAAGCCAGC ACCACCAACC CAGCAGGACT CACGCATTAT CTATGATTAT 240
GGAACAGATA ATTTTGAAGA ATCCATATT AGCCAAGATT ATGAGGATAA ATACCTGGAT 300
GGAAAAATA TTAAGGAAA AGAACTGTG ATAATACCA ATGAGCTCGA G 351

```

## (2) INFORMATION FOR SEQ ID NO:296:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```

GAATTCGGCC AAAGAGGCCT AGAGTGAGAC CTTATCTTAA AAAAAAAAAA AAAAAAATTG 60
TCTATGATT TTTTAAAGC TTTTATTTT GAACTAATT TAGACTTGCT TAAAGTTGC 120
AAAAATAAGA CACAAGTTC ATATATCACT CAATCTGCTT CCTGTAATAT TAACAACATA 180
AATAGCCACA GGGAAATCTT CAAGACCTGG AAATTAAGT TAGGACAGCA CTATTACCTA 240
AACCACAGCT CTAATTTGAA TTTCATCAGT TTTCTCCTA ATGCTGATT TCTGTTCCAG 300
GATCCTATCC AGGAGCCAC ATTGCTCGAG 330

```

## (2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```

GAATTCGGCC AAAGAGGCCT AAAAAATAT AAGTAACAGA GGNAGAAATA ACTGTTATTT 60
GTCAAGTGAC AAGCTTTTAA TGTCAGAATG GCTCACCTAA AGCGACTAGT AAAANTACAC 120
ATTAAAGAC ATTACCATAA AAAGTTCTGG NAGCTTGGTG CAGTAATTT TTTCTTTATA 180
ATAGTTTTGG TTTAATGCA AAGAGAAGTA AGTGTTCAT ATTCCAAAGA GGAATCAAG 240

```

ATGGAAA	ACATGAAAA	CCAAAACAAG	ATGTTGGATT	1. GCTAGA	AGCTGTAAAC	300
AATATTAAGG	ATGCCATGCC	AAAAATGCAA	ATAGGAGNCA	CCTGTCAGGC	AAAACATTGA	360
TGCTGGTGAG	AGACCTTGTT	TGCAAGGATA	TTATACAGCA	GCAGAAATTGA	AGCCTGTCCT	420
TGACCGTCCA	CGTCTCGAG					439

## (2) INFORMATION FOR SEQ ID NO:298:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GAATTCGGCC	AAAGAGGCCT	AATTATTTCT	TGTCTCTCCC	CAAATGAAAT	CTGGGACATT	60
ATGACAATTT	ATTTTCTAA	GGATGATCTT	GGTTCTGCCT	ATTGAAATGT	CCTCACTCAC	120
CTCCAAGAGG	AAGGGGGATG	GCTTCAGAAA	ATGTCCTTAA	GTGTTTTTAT	TTTTCACGAG	180
TTATTTATTG	CAACACTAGC	TCTTCCCTGC	AGGAAGCTAT	ATAATTGTGT	GCTTAATTGG	240
TAACATAGAA	GAATTCCTAG	CTACTTCCTA	GAGAATATAC	TGTTGAATTC	CTTGTCACCTC	300
AAGTATCTGT	TAAAACTCA	ACCGTGGGAA	ACAATGTCTA	TGGATGCCTT	TGGGAAAATA	360
CACATTTTAC	CTATTATTTC	ATCTTTTTTC	TCACTTTGTC	AAGTAGTAGG	TACCCCACTG	420
TACTCGAG						428

## (2) INFORMATION FOR SEQ ID NO:299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAATTCGGCC	AAAGAGGCCT	AACATTATCG	ATTCCATTTT	TTTACTGTTG	TAATTCTGCT	60
TCTTATTGCC	TGTGTAAATT	TCTGCTCTAT	ATTAGTTTCC	TGATACCCTA	TCATTAAATC	120
AGTCTGCCCT	TTTTTCATAT	CATTCTACTG	TTTTGTCTCA	TCTTCCTTAT	ACTTTATTCA	180
GAGACTGTGT	TTTCATGAAG	TTTGTGAAAA	ACATTTTAAA	AATTGTTTAA	AATGTACTCT	240
TTGTCTATTT	CTTGCTATTT	TTTCTTTTGT	ATATTCTGGA	ATATATCCAC	AGCGCTCGAG	300

## (2) INFORMATION FOR SEQ ID NO:300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GAATTCGGCC	AAAGAGGCCT	ATAGATTGTT	ACATTTGTTT	TGTGCATTCC	ATGAAGTTTC	60
TTACCCTTAG	AGTTATTTCT	GTCTTAGTAA	CAGCAACAAG	TGGGAATGGA	GACTTTGGTG	120
ACTGGAGTGC	CTTCAACCAA	GCCCCATCAG	GCCCTGTTGC	TTCCAGTGGC	GAGTTCTTTG	180

GCAGTGCCTC ACCCCAGCG GTAGAACTTG TTAGTGGCTC ACAATCT CTAGGCCAC 240  
 CTCTGCTGC CTCAAATTCT TCAGACCTGT TTGATCTTAT GGGCTCGTCC CAGGCAACCA 300  
 TGACACTCGA G 311

## (2) INFORMATION FOR SEQ ID NO:301:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 392 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GAATTCGGCC AAAGAGGCCT AGCGCGGTGT GTCGTGGTGT GGCGCGGTGT GGCAATGGCGT 60  
 GGTGTCCAG CTGTGTACAC ATTTGTGGTT TTTAAATGTT TGTGGATAC AGTAACACTT 120  
 TGTTAATTTT AATTATATGC AAGATAACTT GATTGCCCTA AACAGCCAT TTGGGTCAAG 180  
 ATAAAGCCAT CGCCCTCTGA AGGGGCTGA GCTGGGTGTC TCCTCCATCA GTCGNTGTGA 240  
 TAACTCTATG CCAGTTTCGA TTTCCAAAGT CAGAAGTGCA AAGCAGGGCT GGTTATTAAT 300  
 CNTGTCAAAT CGTCCAGGTC CTGTGTNGTC GNACTCCATT ANTTATNTAG GTCCATANGA 360  
 TGTGTCTTAC NACGNAACAA ACCCTCTCG AG 392

## (2) INFORMATION FOR SEQ ID NO:302:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 387 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GAATTCGGCC TTCATGGCCT AATGGAATTT GAGTCCAAAG GTAAATATAT TAAACATATA 60  
 GATAAGAAGA AAAGAAAAAC GTTATTTAAG TATCTGATCA GCTCTGCACC CCAGGGACCT 120  
 CCACTTTTGC CCAGGTTTGA GAATTTGATC TATAGAATTA CCTGCATTCT TTCCCGCTCA 180  
 TCCATCCAAT CAGCCACCTT TCTCCCTTCA AAGAAGTGTC TTCATTTTTT TCCTTCTTTT 240  
 GTTATTTTTA TTGACTGCCC ATCACTGTTA TTAAATCCTT CCCTCTTTT TTGAATGAAG 300  
 CAGCAGAGCC TTTTATTTTG TTTTCCTTGT TTTGTTTTTT GTTTTTGTGT TTCAGAAATG 360  
 ACAGGGCTGT ATCAGCAGAG TCTCGAG 387

## (2) INFORMATION FOR SEQ ID NO:303:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

GAATTCGGCC TTCATGGCCT AAAAATTAAG CAAGCAATAC CTAGCCAATA GTTCTGCTTA 60  
 ACTTTTNGGT TAAGTATTTT GTTGGGATTC CTATAAATAA TTTTTCACAC AAAGTTTAA 120  
 ATTTCTGGTG TACTTTGACT CTCAACTGAG AGTGGATAGA GTTTTCTTT TGAGGATTAC 180

ATCTTAA	GTCCATCGCC	TGGCTGGTTA	TAAGCATTTG	T	TTTTG	AAGGTAAAT	240
ATACTCTGGC	CCTTCTTGAC	TCAGTTACAG	GTCAATTTAG	GTCCAGTAAT	AAGAGTCAGG		300
TGTTTGGTTA	TTGCTTTCAG	AGTCAGACAA	ATCTCGAG				338

## (2) INFORMATION FOR SEQ ID NO:304:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCGGCC	TTCATGGCCT	ACGAAGAAAA	AATATTTTNG	AGAGAATTTT	CCAGATTGAA	60
AGAAGATCTG	AAAGGGAACA	TTGACAAGCT	CCGTGCCCTC	GCAGACGATA	TTGACAAAAC	120
CCACAAGAAA	TTACCAAGG	CTAACATGGT	GGCCACCTCT	ACTGCTGTCA	TCTCTGGAGT	180
GATGAGCCTC	CTGGGTTTAG	CCCTTGCCCC	AGCAACAGGA	GGAGGAAGCC	TGCTGCTCTC	240
CACCGCTGGT	CAAGGTTTGG	CAACAGCAGC	TGGGGTCACC	AGCATCGTGA	GTGGTACGTT	300
GGAACGCTCC	AAAAATAAAG	AAGCCCAAGC	ACGGGCGGAA	GACATACTGC	CCACNTACGA	360
CCAAGAGGAC	AGGGAGGATG	AGGAAGAGAA	GGCAGACTAT	GTCACAGCTG	CTGGAAAAGAT	420
TATCTATAAT	CTTAGAAACA	CCTTGAAGTA	TGCCAAGAAA	AACGTCCGTG	CTCTCGAG	478

## (2) INFORMATION FOR SEQ ID NO:305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC	TTCATGGCCT	AGACGAGCGG	AGTAAAAATCT	CCACAAGCTG	GGAACAAACC	60
TAGTCCCAAC	TCCCACCCAC	CGGCGTTTCT	CCAGCTCGAT	CTGGAGGCTG	CTTCGCCAGT	120
GTGGGACGCA	GCTGACGCCC	GCTTATTAGC	TCTCGCTGCG	TCGCCCCGGC	TCAGAAGCTC	180
CGTGGCGGGC	GCGACCGTGA	CGAGAAGCCC	ACGGCCAGCT	CAGTTCTCTT	CTACTTTGGG	240
AGAGAGAGAA	AGTCAGATGC	CCCTTTTAAA	CTCCCTCTTC	AAAACATC	TCCTGGGTGA	300
CTGAGTTAAT	AGAGTGGATA	CAACCTTGCT	GAAGNTGAAG	AATATACAAT	ATTGAGGNTA	360
TTTTTTTCTT	TTTTTTTCA	AGTCTTGATT	TGTGGCTTAC	CTCAAGTTAC	CATTTTTTCAG	420
TCAAGTCTGT	TTGTTTGCTT	CTTCAGAAAT	GTTTTTTACA	ATCTCAAGAA	AAAATATNTC	480
CCAGAAATTG	AGTTTACTGT	TGCTTGATT	TGGACTCATT	TGGGGATTGA	TGTTACTGCA	540
CTATACTTTT	CAACAACCAA	GACTCGAG				568

## (2) INFORMATION FOR SEQ ID NO:306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```

GAATTCGGCC ATGGCCT AATCAAAAAT ACCTTACCTT GTTC T GTGAAAGTAG 60
CCTAAGGCCT GTCAAAAACA CAAAGAGCCC AAACATAATA AAAAAGATT AAGAAGACAA 120
TATTAAANAA GCATTGTCTC AAAGATCTAC TGCTATATTA TATTTAAGTC AGGAAGTAAA 180
TCATCTTAAA ATAATGGTCA CTCTTCAAC AGTGAGAGTT AACACCCAAA GTGAACGTAA 240
CACTTCAATC ATCAAGATTA CAATATATGG ACTACTTCTG GTAATAACTT GGTGCTGTT 300
TAGAAGTGT ACCAACTAA CATCATGTGC AGAGAGGAAA GAACTCGAG 349

```

## (2) INFORMATION FOR SEQ ID NO:307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```

GAATTCGGCC TTCATGGCCT AGTGATGGG ATGTGATGTG GGCATCTGCT AATTCGTCTG 60
CAACTACATG ACCTAAGATG GCCTCATTAA TCTAAGGGGC CTCAGCTGGA ACACTGCGCT 120
CTGCTGGATA ACCCAGGTCT AGTGTATCC TCCAGACTAG ACCTGGCTTC TTCTGGGCA 180
GTCTCAGGC AGTGTCCAA GACGGTGAGA GCAGAAGCCT AGGTTGGCC ACATATCCCT 240
AACTCATAGG ATGGTGACAT AACTCTACC TCTTATGGAG AAATAGCAAG TTACTGCA 300
TACGGGACGA CTCGAG 316

```

## (2) INFORMATION FOR SEQ ID NO:308:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GAATTCGGCC TTCATGGCCT AGTGGCAACG ACTTGGACAT CTGAGCTGTC ACTGCCGAAA 60
ACAGGCCGCA AGAGAGATAA TCAATATGCA TTTCCAAGCC TTTTGGCTAT GTTGGGTCT 120
TCTGTTTCATC TCAATTAATG CAGAATTAT GGATGATGAT GTTGAGACGG AAGACTTTGA 180
AGAAAATTCA GAAGAAATTG ATGTTAATGA AAGTGAACCT TCCTCAGAGA TTAATATAA 240
GACACCTCAA CCTATAGGAG AAGTATATTT TGCAGAACT TTTGATAGTG GAAGGTGGC 300
TGGATGGGTC TTATCAAAAG CAAAGAAAGA TGACATGGAT GAGGAAATTT CAATATACGA 360
TGGAAGATGG GAAATTGAAG AGTTGAAAGA AAACCAGGTA CCTGCTGACA GAGGACTGGT 420
ATTAAATCT AGAACAAAAC TCGAG 445

```

## (2) INFORMATION FOR SEQ ID NO:309:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGTTTCATGGCCT AGAAGTTCCT TATGCTACTT TTTGAGCA TCCTATGAAA      60
TACACCAGTG AGAAATTCCT TGAAATTTGC AAGTTGTCTG GGTTCATGTC TAAGCTTGTT    120
CCAGCTATCC AGAATGCCCA CAAGAATTCA ACTGGATCTG GAAGAGGAAA GAAACTGATG    180
GTGTTAACTG AACCCATTTT GATTGAGACC TACACAGGGC TGATGTCATT CATTGGAAAC    240
CGCAACAAAC TTGGCTATTC CCTTGCCCGT GGGAGTATTG GTTTTGTAGA GTCTTTTGG    300
TACCATAAGC ATATCATCCA CAGATATGTC ACTTTGAAAA TTCCAGTTTG ACCCAGCCTA    360
TTTTTGGACT NAAACAATTA ATTATTTTAA AATGACGCTT TATGATTTAG AAATTTAGTA    420
TTTCCGAAAA TTAAAGGCT TGATTGGACT GATAGATACA CACTTTAGAC CTCATACAAG    480
AATAATCAAA TTTCTTAAA ACTAGAAAAT AAATGCTGCT GATACCTCGA G              531

```

## (2) INFORMATION FOR SEQ ID NO:310:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTCGGCC TTCATGGCCT AACTCATGC TGCCAGTCCC CAAAAGACTT CATTCAATTC      60
ACATATATGT GACCGCCTGC TACGTGCCAG GCGTGGGCCA GGTCCTAGGG ACAAGGAGA      120
GGCCTCCGCA CCCACCCCA TGACCCATAC CTCCTCTTCC CCACCTCCCT GGGCCAGCCT    180
GCCTTCCTTC TCCCTCCTCC TCCTTCCTGG GGAAGGAAG CCCACCTTC TGTGCGCAGT    240
CAGCTCCTAA GCACGCTCCC GCTTCCCCTG GCCTCCCAT TAAAAAGGG AGGCAAAGGA    300
TGTCACCACT GTCACACAC TCATGGCTTT GCTCTGGAA GTCTGCAAA TAAATGAAA      360
GTTCTCCAAC CCGTACTCGA G              381

```

## (2) INFORMATION FOR SEQ ID NO:311:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

```

GAATTCGGCT TCATGGCCTA CTTTGACGCA CCAGGCACAA CCCAGAAAGA CGAGATTGTG      60
GAAATCCATG AGGAGAATGA GGTGCGATCT GGTACCCAGT CAGGGGGCAC AGAAGCAGAC    120
GCAGTTCCTG CACAGAAAGA GAGGCCTCCA GCACCTTCCA GTTTTGTGTT CCAGGAAGAA    180
ACTAAGAAGC AATCAAAGAT GGAAGACACT CTAGAGCATA CAGATTAAGA GGTGTCAGTG    240
GAAACTGTAT CCATTCTGTC AAAGACTGAG GGGACTCAAG AGGCTGACCA GTATGCTGAT    300
GAGAAAACCA AAGACGTACC ATTTTTCGAG GGGCTCGAG              339

```

## (2) INFORMATION FOR SEQ ID NO:312:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

```

GCCTGCCTCG AGTCTTGGAT ACATCACACT TGAGTCAAAT CCTGGATACT GCCAAAGGAA      60
CCTGAAAATC CAGGAGACAA CGCTAGCTAT TCCTGTGAAC CTCTAGAGGA TTTGCGCCTG     120
CTCTTCAAAC AACCAACCAGG AGGAAAGTAA CTAAAATCAT AAATCCCAT GGCCCTCCCT      180
TATCATATTT TTCTCTTTAC TGTTCTTTTA CCCTCTTTCA CTCTCACTGC ACCCCCTCCA      240
TGCCGCTGTA TGACCAGTAG CTCCCCTTAC CAAGAGTTTC TATGGAGAAT GCAGCGTCCC      300
GGAAATATG ATGCCCCATC GTATAGGAGT CTTTCTAAGG GAACCCCCAC CTTCACTGCC      360
CACACCATA TGCCACACT CGAG

```

## (2) INFORMATION FOR SEQ ID NO:313:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

```

GAATTCGGCC TTCATGGCCT AGGGGGGTGG GCTGATGGAG GGTAAGTAAA ACCTCCTACT      60
GGAAGATGTT CTCCTAAGAG TTCCACTTCA TTTTCTATCC TTTGCAGAGG CGATCGTGAT     120
TGCTGTGTTT GGAAAGGGAC AAAGTGGCCT GGTGGTGGCA AATGAGGAGG ATGATGGGGA      180
GAAAGGTGAG GAGGATGTAT AAGAAATGGA TCAC TAGAAA TAAGGGGTGG GAATGCAGCA      240
TATGGTACTG GTAAGTGCTG AACTGAACAT GCCTGAAGCA TTGGAGGAGG CACACTACAG      300
ACAGGGAGGT GCTGTCCACT GAAAACCACA GAGCATCCTG GGACCTGCTG TGTACTACAA      360
GCAGGGATGT GCTGGCCTGT GCAGAGTGGA ATCCCATGTG GTGCCACTGT TGTACTGTG      420
TAAGAAACAG GGACTGTTCC TTGATGGAGC TGATCATGTA TGTCAACCAT GACTGCATTC      480
TGCTGGGGTG GATGAGCAGC AGGATGTAGC AGACGGGGAG ATACATTCGG AGGGTGGAAG      540
GCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:314:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC TTCATGGCCT AATTTGTGGC TTACCTCAAG TTACCATTTT TCAGTCAAGT      60
CTGTTTGTGTT GCTTCTTCAG AAATGTTTTT TACAATCTCA AGAAAAAATA TGTCCCAGAA     120
ATTGAGTTTA CTGTTGCTTG TATTTGGACT CATTGGGGA TTGATGTTAC TGCACTATAC      180
TTTTCAACAA CCAAGACATC AAAGCAGTGT CAAGTTACGT GTGCAAATAC TAGACTTAAG      240
CAAAGATAT GTTAAAGCTC TAGCAGAGGA AAATAAGAAC ACAGTGGATG TCGAGAACGG      300
TGCTTCTATG GCAGGATATG CGGATCTGAA AAGAACAATT GCTGTCCTTC TGGATGACAT      360
TTTGCAACGA TTGGTGAAGC TGGAGAACA AGTTGACTAT ATTGTTGTGA ATGGCTCAGC      420
AGCCAAACACC ACCAATGGTA CTAGTGGGAA TTTGGTGCCA GTAACCACAA ATAAAAGAAC      480
CACACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:315:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

GAATTCGGCC	AAAGAGGCCT	AGGAAGTAAC	AGTGTATCAT	GTATGCCACT	GATTCCAGGG	60
GACACTCCCC	TGCTTTCCTC	CAACCTCAGA	ATGGAAATAG	TCGTCACCCA	TCTGGCTATG	120
TTCCAGGGAA	GGTTGTCCCA	TTGCGTCCCC	CTCCTCCTCC	AAAGAGTCAA	GCTTCAGCCA	180
AATTTACCTC	CATCAGACGA	GAAGACCGGG	CAACCTTCGC	ATTCTCACCT	GAAGAACAGC	240
AAGCCCAGAG	AGAAAGTCAA	AAGCAAAAGA	GACACAAAAA	TACTTTCATT	TGTTTTGCTA	300
TTACTAGTTT	CTCATTTTTT	ATAGCACTTG	CAATCATTTT	AGGAATATCC	TCAAAATATG	360
CTCCACTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

GAATTCGGCC	TTCATGGCCT	AATTTAAATG	TGGACAGATT	GGAGGGGAAA	GGTTTGCAGC	60
AAAAATCATA	AGTAGAAGGA	AACAGAATGG	TTAAGTACAC	AGTGTAGTAG	CCATTTAGGA	120
AAGTTATAAG	CCATTAAAT	GCCATGTATA	AAGTGTTTT	GATAAGAAAA	AATCAAAGTG	180
TAAAGGAGAA	TACAAAATTA	TATGTGTACT	GCGGACACAT	CTGTATTGTT	CTGTGTATGG	240
AAAACAGACT	GGGGAGAAAT	AGCTTTAAGT	CCTAATAGTA	ATTTCTTTT	TCTCTCTTCT	300
TTTTTCTGCT	TTCTCTTTTC	CCTGTCTCCC	TCAATATTGC	ATATCTTTCC	CATTAAAAAG	360
TATTGTATTA	TATATCTACC	AACAAGACAT	TTGTTTCAGA	TTTTTTGGTT	TTGTCTTCAA	420
GGAACATTCT	TCTGCATACA	AACTCGAG				448

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC	TTCATGGCCT	AGAGATGGGG	TTTGCCACG	TTGCCCAGGC	TCATCTCCTC	60
GAACTCTTGG	ACTTAAATGA	TCCTCCCGTC	TTGGCCTCCG	AAAGTGCTGG	GATTACAGGC	120
ATGAGCCACA	GTGCCCAGCC	TCTACCCGCT	TTCTGTGGTC	AGAAATAGAC	GCAGGACATT	180
CCATCCATAC	CTTATTCTT	TCCTGGCTCT	TCTCCCATGT	GTCCTCGTGG	GTCCTGGTCA	240
CCCTCTTAGC	TGCTGTGTAA	TAACCCCTGT	GCAGATGCAG	CAGCCACGAT	GTCAATCAGTC	300
CCCACCCAGT	GATGCATAGG	GGGCTTCTTC	CCCTCCCTGG	GTACAGCACT	ACCAATTCTCT	360
GTGTATGGGC	CGTGTAGGC	AGGGGCCACG	TCCTGGCCCC	GCTTCAGTCC	CGGCTCGGGC	420
TCCTCGCCGG	GGTCTCCATG	CCACTTCCCT	CTCCCATCTC	CACATCTCGA	G	471

(2) INFORMATION FOR SEQ ID NO:318:

(i) SEQUENCE CHARACTERISTICS:



(A) LENGTH: 506 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GAATTCGCCT TCATGGCCTA CAGCATCGTC GGGACCAGAC TCGTCTCAGG CCAGTTGCAG	60
CCTTCTCAGC CAAACGCCGA CCAAGGAAAA CTCACTACCA TGAGAATTGC AGTGATTTGC	120
TTTTCCTCC TAGGCATCAC CTGTGCCATA CCAGTTAAAC AGCTGATTCT GGAAGTTCTG	180
AGGAAAAGCA GCTTTACAAC AAATACCCAG ATGCTGTGGC CACATGGCTA AACCCTGACC	240
CATCTCAGAA GCAGAATCTC CTAGCCCCNC AGAATGCTGT GTCCTCTGAA GAAACCAATG	300
ACTTTAAACA AGAGACCCTT CCAAGTAAGT CCAACGAAAG CCATGACCAC ATGGATGATA	360
TGGATGATGA AGATGATGAC GACCATGTGG ACAGCCAGGA CTCCATTGAC TCGAACGACT	420
CTGATGATGT AGATGACACT GATGATTCTC ACCAGTCTGA AGAGTCTCAC CATTCTGATG	480
AATCTGATGA ACTGGTCTCG CTCGAG	506

(2) INFORMATION FOR SEQ ID NO:319:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAATTCGGCC TTCATAATTT TTCTTATCTT CATTCTTTTC GGTGCCCAA TAAGCTCATG	60
TTTTCCATGG TCGGTTTAGT TTTTACTAGT CGTTGGCTAG TTTCCTAAT GCATGTGAGT	120
TAGCATGTGG TGATGGCGGA GTAATGTCAT GTCTTGAGGA GAACATTGCT TGAGTTCCAA	180
ACTTAGCTTT TCTACTTCTT GGTGAGACTT TGGACAAATT ATTTTGTAGC TTGTTTCCTC	240
ACTTAAAAAA ATGGGGTTTG TACCTTTAGT TGTTCCTAAG GTTGTGAGGA CTTGAATAAT	300
AAAGTATATA GCTATAGATA AGAAACTTG GGGGACTCGA G	341

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 572 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

GAATTCGGCC TTCATGGCCT AATTTTTTTC AAAACCTTGA AATGACATGT TAAAATGCTG	60
CTTTGAACTG GTTTTTCTTT AGCCTGTAGA AAAGAACTTT GAGTTACTGG TCAAGTAGTT	120
TTGACCATAC TGGCTTAGGA AAACAGCGCA TCAGCTGTCT GATTGCTATC ATGTAAAAAT	180
CTGTGAACGA CTTTGAGAAG TCATTGGTGG ATTATGTTGT TCAGGAATAG GAATGGAGCT	240
TTCTTCCTAT CACTTGATT TTTTTTTTTT TTTGGAAGGG GGGAGGAGGA GGAATTATTT	300
CCNCCCTAAT AAANGGNGGN NTTAATCCTG GGCCCCNNNA AGGCTGGNNN GGGTCCNGAT	360
KTGGGGTNC NNTTTATTGG GAACTGACNG GGNTTAAAT TCCGGTTTT TTTTTTTTCT	420
TGAATGATCT TGTGTTGTAG AGTTGAATAC AGTTCTAGGG AAGTATGATC ACAAATGAA	480
TGTTGGCAGT TCTCCTATG ATTAATATGT CAGACATGTC AAAATTCTCT CATCATGTGT	540

ATTTGCC TTTATTTCAGT CCAGGACTCG AG

572

## (2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

GAATTCGGCC TTCATGGCCT AGATAACTTT GAACAGAATG GGAGGCAGGT TTACCCTAAG	60
CAGTTCCCCA CTTGAAGTTT TCCTTTAGTT TAGTGATTG AGGGGCCCAA AATACTTTCA	120
CATTTCCCCC CTTTCTTTT TAAAAATCTG TTGGAGAACG CATTTTAGAA GAAAATGAGT	180
CTCTGGCCTC AGGTTTCGTC TGATCTCTCA TGGCTAGGAT GCTTTATTCC TAGATAGATA	240
GGTCCTGAGT TATTAGGAAA GCTCCTTTT AGAAGGTTGT GAAGTCTCAT GTCCTGTGAA	300
GAGAAAATAG GGGGAGGACA ACAACAAACA AAAGAACTCG AG	342

## (2) INFORMATION FOR SEQ ID NO:322:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 391 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

GAATTCGGCC TTCATGCCTA CAATATTGTT TAATAATTAT TCAGAAATAT TCAAGTATAA	60
TACTTAATAA AAATTTCTGC TATGTGCAAG GCATGGTGCT AGGTACTGAG ACTATAAGGA	120
GGTAAAAGAT AGTTCCTGCC CTTAAAGACT TCTATAATTT AATCAGAAAG GAGAGTATAT	180
GAAAATCATA CTGAATAAAA AGTGGCTCAT AATAAATGCC AAGGAATCAA CACAAAGTCC	240
TTTCCTGGT AGGGAAAGTT TTTTGGAGGA AATGGGACAT GAATTTGGCT TTGAAGGATG	300
TGGAGGTTT AGATAAGAGG GAGAACTGT TGTGTTCTAG GTTAGAGGAA CAACATAAAC	360
TCAAAAGAGA CTAAAGAAGA ACGGACTCGA G	391

## (2) INFORMATION FOR SEQ ID NO:323:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 324 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

GAATTCGGCC TTCATGGCCT ACCCTGAGCA GTGCCTGGCC CATACTGGAT ACACAGTGTG	60
CATTTTGTGG GGAACAAGG AAGGAAGGTA ATATTCCAGC TCAGGGTTCT CTCTGACCCT	120
GAATAGTGTT ATGGACTCTT TGGGAAGGAT AGAAGCTTTC TTAGTTTCT GACAGAGGCC	180
TGTAGGCTGC AAACGTTGTG TTTGTAGAAA GAGTTGTAAA GGTGTCATGA GCCTTTATTT	240
AAAAGTGTCT TTAATGTATC TTAGGCATCT TTTCTTTTC ATCTCACACT ATGGACAGTT	300
TTAAGTGCAA AAGGGGAAC CGAG	324

## (2) INFORM A FOR SEQ ID NO:324:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```

GAATTCGAGC TCGACTGGAT AGTTTTTCTT TTAAACTTA AAATGCTTTT TAGTTTGGCA      60
CTCCGTAGTA AAGGAGGTTT CAGAAGCCAG TAAGAGAACC TCTGCCAACT ATGAAAGAGA      120
AGATATTTCT ATCTACAAGT TATTTTCAGGA TCAATTATTC AATTAATATT TTATATAATA      180
GAAAGGTTTT ATTTGTTAGG ACTTTATCTT TAAGTTCCCC AAGAGTAAAA AGGTCTAGTC      240
ATTATTATAC TGTGGGAGAA TGATAGAAGA TTGATTACAT TGAAGCTCCA GAACTTCTAT      300
TTATTTAAAA GATTTAAGAT TTGACACACT CTCGAG                                336

```

## (2) INFORMATION FOR SEQ ID NO:325:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```

GAATTCGGCC GGCATGGCCT AANCTAAAAA TAAATNAAC CCAACGCATA NAANACGGGT      60
TTATCTCTCC TAAAAACANT TNAGTTTNGA CTAAATGAA ACANATCATN NNACAACNTC      120
ATTTTNAAT GAAGATTITA CCTGGACCCT AGGTGTGCTA TTCTTCCTAC TAGTGGACAC      180
TGGACATTGC AGAGGTGGAC AATTCAAAT GAAAAAATA AACCAGAGNA GATACCNCG      240
TGCCACAGAT GGTAAAGAGG AAGCAAAGAA ATGTGCATAC ACATTCCTGG TACCTGAACA      300
AAGNATAACA GGGCCAATCT GTGTCAACAC CAAGGGGCTA GATGCAAGTA CCATTAAAGA      360
CATGATCACC AGGATGGACC TTGAAAACCN GNAGGAAGTG CATCTCGAG                                409

```

## (2) INFORMATION FOR SEQ ID NO:326:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

```

GAATTCGGCC TTCATGGCCT AGGCGGCGGC AGCCGAGGGC GACTGCGCA CCCGGAGTGA      60
TGAGCCCGCC CGAGACGATG CCGCCGTGGA GACAGCTGAG GAAGCAAAGG AGCCTGCTGA      120
AGCTGACTTC ACTGAGCTCT GCCGGGACAT GTTCTCCAAA ATGGCCACTT ACCTGACTGG      180
GGAAGTACG GCCACCAAGT AAGACTATAA GCTCCTGGAA AATATGAATA AACTCACCAG      240
CTTGAAGTAT CTTGAAATGA AAGATATTGC TATAACATT AGTAGGAAGT TAAAGGACTT      300
AAACCAAGAAA TATGCTGGAC TGCAGCCTTA TTGGATCAG ATCAATGTCA TTGAAGAGCA      360
GGTAGCAGTT TTTGAGCAGG CAGCTTACAA GTTGGATGCA TATTCAAAAA AACTGGAANC      420
CAAGTACAAG AAGCTGGAGA AGCGATGAGA AACTTATTTT TATGGGACAG AGTCTTTTTT      480

```

TTTTAAT AAGGACTCG AG

502

## (2) INFORMATION FOR SEQ ID NO:327:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

```

GAATTCGGCC TTCATGGCCT AGAATATTCC ATATCAGTAC ATATAGCACT GCCTCACTTT      60
TTAATGGCTA TATAAAATAG TACTATAATT TTAAACCAGT CACCTGATGG TGGGCTTAGT      120
AGTTATTCTG TGGCTGTAAC CAACATCACT GCCATGTGCA CTGGTACACA TACAGAAGTC      180
CACACAAGTA GGCCTGTATC TGTAAAGTAA ATACTGGTGG GATTACTGAG TGAAAGGAGA      240
CGTGAATTTT TAGATTTTTA CTATGAAAGA CAAACTGCTC TTTATGGGGA TTTTATTAAT      300
CTACAACCCC ATCAACAATG TATGAGAGCC CATTTTTCAC ACACTTGCCA ACTCAGTAGG      360
TTATTAAACC TTTTGGTCTC TGCCACTTGT ATATCCCAGA TCAACTTCTA ATTCTGCTTC      420
ATATTGTTTG CTATCCTTGA GAATATTCTT GTCCACCTT GTCTCGAG      468

```

## (2) INFORMATION FOR SEQ ID NO:328:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

```

GAATTCGGCC TTCATGGCCT AGGGAAAGGA AGTGACATAG TGGTATAAAA ATTTGAAATT      60
TGTGATGTGG CTTAGAAGCT TGATATATAC GGGTATGATT GCAGCTGCTA CATTTAGCCT      120
TTTTTTCTTT CTTTTTGGAG AATGAACCGC ATTAAGAAAT ACATTTTACA TCACAATTTA      180
GCAAGTATAT GTGCTAACAT ACTTCTGTTT CTACAAGGGA TGTATTGTGG TATTTTCTAT      240
TGCATTTTAC TCTAATTTAG TTCATTTAAA AAAATGCTGA TTCTAACCCA TGAACTCGAG      300

```

## (2) INFORMATION FOR SEQ ID NO:329:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

```

GAATTCGGCC TTCATGGCCT ACCACCACAC CCGGCTAATT TTTGTATTT TTAGTAGAGA      60
CGGGATTTC AATGTTAGC CAGGATGGTC TTGATCTCCT GACCTCGTGA TCCACCCGCC      120
TCGGCCCCC AAAGTGCTGG GATTACAGGC ATGAGCCACC GTGCCTAGCC GACTCTTGAG      180
TTTTGACAAG AGGTGATATC TGGGAGATTA ATAAGTATTT AGTTTAAGAA AACATTTAGT      240
AAGCCTGTCC TGTGTTCCCA CACAAAGGGT ATAACAGCAA TATATTCCAT AAGAGTAAAG      300
CTCGAG      306

```

## (2) INFORMATION FOR SEQ ID NO:330:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

```

GAATTCGGCC TTCATGGCCT ACATTACCAT CAGATTGACA TATTTAATTA TCAGATATCT      60
TTCTTTTGCC AAAAAGTTGT GGTGAGTTG GCCCTGGGAT TTATAAATAC ATGCACACAG      120
CACATTTCTG TCATTGTTCA CTGCAGTCTT TTAACACATC TTCTCAGCAA TATTCTTAAT      180
GTTTCCAGCG GGAAAATTGT AAATTATTTA ACCACTGAAT TAGAGGTGTG TTGTTTTTTA      240
GCTAATCAAT AGCCATTGAA TGCTTAAATG GGCTTTAAAG TAGACAAAAG TAAAAGACAG      300
CAAAGAAAAT TAATCAGTAA GATTGCCCAT ACTCCATAGA CACTTGAGCA GCTACTTTAG      360
TCATTTTGAA ATACACGCTT TATGTTTCC CTTGGACTGG CATATTCCTG TCATTTATAA      420
AAAGAATATA CATTTGTAAA TTAAGGTGT GGACATTCAT TATTGAAGGT AGAAATAGTT      480
ATAATCATCA GTGTCTAGAT ATATCTGAAG AGAGGTACTC GAG                          523

```

## (2) INFORMATION FOR SEQ ID NO:331:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

```

GAATTCGGCC TTCATGGCCT AAAGTAGGCA AGGGATAATA ACCAAAGAAG NAAATTTTCAT      60
GAAGACTAGA CATCATAAAG CATAATTTTA ATAGTCACTC AACCAAGTAT TTTTATTTT      120
TTATGGATAC TCTGAATGGC AATTAAATGT GAAACCCAGT TTCTTGGGCA AGTCAAATTC      180
TGGAATCACA TCCACCTAAA TTAAATGAC TAGCTCGTAT TTTCCCCATC TTCAAGTTTC      240
ACATCCTGGT CATCAAAGA CTCGACAGCA AGACTTAGAA TGAAAAAGGG TACTTGTTTA      300
TATTAATATT TTTTACTTGA ACACGTGTAG CTTGCAGCAG GTTCTTGATG AATGTGCTTT      360
GTGTCCAAA TGCCTCCCCA TTGTACACAG GTGTACACCA TGCATGCACC AACACCACTC      420
GAG                          423

```

## (2) INFORMATION FOR SEQ ID NO:332:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACAAGCCACA AAAGTGTGGT GAATGGAAAA GAATGTATAA      60
ACTTCGCCTC ATTTAATTTT CTTGGATTGT TGGATAACCC TAGGGTTAAG GCAGCAGCTT      120
TAGCATCTCT AAAGAAGTAT GGCGTGGGGA CTTGTGGACC CAGAGGATTT TATGGCACAT      180
TTGATGTTCA TTTGGATTGT GAAGACCGCC TGGCAAAATT TATGAAGACA GAAGAAGCCA      240

```

TTATAT... ATATGGATTT GCCACCATAG CCAGTGCTAT ...TGCTTAC TCTAAAAGAG 300  
 GGGACATTGT TTTTGTAGAT AGAGCTGCCT GCTTTGCTAT TCAGAAAGGA TTACAGGCAT 360  
 CCGGTAGTGA CATTAAGTTA TTAAAGCATA ATGACATGGC TGACCTCGAG 410

## (2) INFORMATION FOR SEQ ID NO:333:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

GAATTCGGCC TTCATGGNCT ACCTTAGCCT CAGCTCTTTC TTCTGGGTG TTTGTATTTT 60  
 CTTTCTGTC CCAAACAGTT TCCCCACAA AAAGAACTTT ATGTCTTTCT CTGTCTTCCC 120  
 TCAGTCCTTC CAGTCAGCAG CCTGTGATTG GGCTTTTCCC CTCAGAAACG AACAAATCCAG 180  
 AACCCACTGT TTAAACAAC TGTATTTTGC CTTGGGAAGT CCCATTGCCT TCCCTGAAAA 240  
 CATTAAACAT TCCTCCGATC CCCAGCCTGA GTCTCTCTGT CTCTGGGCCC CATCTGCTC 300  
 CACAGCAGGG CTGGTGTGTC CAGCACAGAG TGACCCTCCG ATGCCCTTTC CCACCCGCCG 360  
 CCNTGCCTCC CTCGAG 376

## (2) INFORMATION FOR SEQ ID NO:334:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GAATTCGGCC TTCATGGCCT ACGGGTTGTT ACATATTTAT TCTTTTTTGA AGCCCATCAC 60  
 TACATCGCCA TTACGTTTTA CACTGTGTAT GTAACAAATG TTACCACITT GTTCTTTATT 120  
 CCTTTTGGGA TCATCTTCAG TGGGGGTAAA ACAGTATCAA GCTCTAGAGC TCCCTCTGGT 180  
 GGTTTTTGTG ACATATTTGA AGATGGCAGC TTGCTTTTTC AGAATTTCTG GCTCTGCTCT 240  
 CCTGTTTTTT ATCTGTACTT TTTTCTCTCA TTGTGCCTCT TGCACACACA CACCCCCCCC 300  
 ACTCGAG 307

## (2) INFORMATION FOR SEQ ID NO:335:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAATTCGGCC TTCATGGCCT ACATTACTCA GCTTTCCTGA ACAACCAGGC ACGACCTCT 60  
 GCCTGCAGGC CAGGCACGTG CTGCTGCCCC TGGAGGCGGG TGGGGGTGCC TCCGCGCTGG 120  
 AGGACACGGG GTGCACTGAG GCTTCCCAT TGGTATGGGG GAATGTGGTG ATGAGGGGAT 180  
 CGGTGCCCCG CGGACCGCAC ACATGCCATG TGTGGACACT CAACAGGAAG CTTTCGGTCAG 240

```

CATTTCAGCT G TGCAG AGCCAGGGCC CTGGAAAGTC CCTCAG TGTGCACAGG 300
CCTGCTCACC GTGCGTGTGC GGGCAGAGCC TCCCTGGGGA GGCAGAGGCC CCGCGTTCTG 360
CACTCGAG 368

```

## (2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 437 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TTCCTGCTCT TCTAGGTAGT 60
CACACTTCAC TAAAGTGTCA TCCACCACTG TGTGAATCC GAAGAATGAC AATTTTCTAC 120
CACTGGTGTA AAAAACAAAC ATTTGAAGAC CCTTGTGCAT TGTGTGTAC AAAGCTAAAT 180
ACATGGAAAT CGTTAATATC GCTGATATTA AGTAATTCC CCACTCTGAG TGAATACTTT 240
GATGATTGCC AACAGTGGCT AATAAAATGA CGGCTACCAC ACTCATGGGT CACTGGGGCT 300
GCGCAGGGCT CTTTGAGGTG GGTGGCTTCT TTTGAAAGT ACTATGAACG TCTCGAAGCA 360
GTATTCTAGT GATAAGAATT CTTACATAG CCAAGCGCCC CACGTTTGTT CCCACGTTT 420
GTTCCCTTA TCTCGAG 437

```

## (2) INFORMATION FOR SEQ ID NO:337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCGGCC TTCATGGCCT ACCAAACCCA ATTTATTTAA AAANATACTT CTATATCATT 60
ATATGTATTA CCAATTGTTT TAGCCTTATA CAGGATGCGG TGTNCTGTGC TCCTNNGTGA 120
ATGTCNGTTG CTGGTAGCTG GTTATGCTCA TGATGATGAC TGGGTTGACC CCACAGACAT 180
GCTTAACATAT GATGCGGCTT CAGGAACAAT GAGAAAATCT CAGGCAAAAT ATGGTATTTT 240
AGGGGAAAAG GATGTCAGTC CTGACTTGTC ATGTGCTGAT GAAATATCAG AATGTTATCA 300
CAAACTTGAT TCTTTAACTT ATAAGATTGA TGAGTGTGAA AAGAAAAAGA GGGAAGACTA 360
TGAAAGTCAA AGCAATCCTG TTTTATAGGAG ATACTTAAAT AAGATTTTAA TTGAAGCTGG 420
AAAGCTCGAG 430

```

## (2) INFORMATION FOR SEQ ID NO:338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GAATTCGGCC TTCATGGCCT AGAAATAGAT TTTTCTCAG ACTCTCATCT CACATTCCTT 60

```

```

TTTAAGA      CTNGTCCTA TCCCCACCCC AGACGTTTCC A      GCTTT TATTTTCTAT      120
AATAATTCCT GGGGGCCTCT ATTAAAGGCC TTTTCTTTG ACTACTTACA TCCATTATAC      180
CAGTATCTTT GTCAGTAAAA TTTTATATAT CTTTATTCT GTCATCAGGT TAAGAAACAA      240
TAATTGTATT TTAAAGGAA AATATTTTAC GATGCTACTA AGCAGTTACT TTGTCCACTT      300
ATGCAGGATA CTCGAG                                     316

```

## (2) INFORMATION FOR SEQ ID NO:339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC TTCATGGCCT AGCTGGCTGG CACCTGGAGA ATCCCTGAGC TGGAAAAGCA      60
GCTTGGTCTG CAGAACTGAG TCACAAGACT GAGGCACTGG GGAGCCTCAG CCCCATCTGG      120
TTGTTGNTCC CTCTGTGACC TTGAGCTTGT CTCCACTTG GTGCCGTAGG CCCTCATTG      180
TCCATTGAAG TTAGCACCTG TCCCTCCCGT CCTCCAGAGA GGTCAGGAGG ATAAGCATTA      240
GAAGACTCAC TGTGGTTTAT TGAGTGCTTA CTGTGCAGGT ACTGCTGTAG TTTTGTGCAA      300
CTCGAG                                     306

```

## (2) INFORMATION FOR SEQ ID NO:340:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

```

CAAACCTTTG AGTNNNACAG TTAAGATATT ATGTGAAGCT CAGAATCATG TTTCAGACCA      60
TTGAAATTAC TGGTTAAAAT ACAAATAGCT GAAGACATGA TGTAAGAT TAAGTACTTG      120
GTTTTGTAAC ATATTTACCA ATTAAAGTCA CAAAATATTT CTCATTATTT ATTCATGCAG      180
GTAAGTGAAG AAAAGATAGT GCAGAAATCA ACTTTAAATA AAAAATTATT CCTCCCCTTC      240
CTCCCACTCC CCTATACTCT ACAAATGTT TTCCCTGGGA CTAGGCCTTG AAAAGGCCAC      300
TACATATTAG TGTGACATGC ATTACTGTCT GCAATTAAAA AAGCTAACCT TGTGGTGATT      360
GTAATTACAT TATAAAAATG TCCACATGCA TAAATCTAAA AAAGGTTGAA AACCTACAGT      420
AAATCTACAA TATAGTGTTT ACATTTGACC ACTGGTTTGT GTTATGTAGA AGTCATAGAT      480
TTGGTAAAGC ATTGTAACAA TTTAGGAAGG CATCTAAATC TTTAAGTTCT GGACAAATTT      540
TATGTTTAA TCTACAAAAT TGCATGAAGG CTAACCTGAG                                     580

```

## (2) INFORMATION FOR SEQ ID NO:341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:



```

GAATTCAGAN TCTATG GTAGCACCAG ATGTCCAAAT TGAAGG G AAAGGAACCC 60
TCCTAATATC TTCCGAAGAG GGAGAGACGG AAGCTACTAA NTCACAAGAA GTTNTTCAGA 120
ATTTGGAATT AGAANTGGCA NCCGGCTTCA AGCAGATGAC TTCNTCCAGG ACTATACTTT 180
ATTGATCAAC ATCCTTCATA GTGAAGACCT AGGAAAGGAC GTTGAATTTG AAGTTGTTGG 240
TGATGCCCCG GAAAAAGTGG GGCCCAAACA AGCTGAAGAT GCTGCCAAAA GCATAACCAA 300
TGGCAGTGAT GATGGAGCTC AGCCCTCCAC CTCCACAGCT CAAGAGCAAG ATGACGTTCT 360
CATAGTTGAT TCGGATGAAG AAGATTCTTC AAATAATGCC GACGTCAGTG AAGAAGAGGG 420
AAGCCAGCTC GAG 433

```

## (2) INFORMATION FOR SEQ ID NO:342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT AAAACTCTAA TAGTCTCTCT TCAGCGGAGC CACTGAAGGA 60
AGATAAGCCT GTCACTGGTC CTAGGAACAA GACTGAAAAT GGACTGACTC CAAAGAAAAA 120
AATTCAGGTG AATTCAAAAC CTTCAATTCA GCCCAAGCCT TTATTGCTTC CAGCAGCACC 180
CAAGACTCAA ACAAACTCCA GTGTTCCAGC AAAAACCATC ATTATTCAGA CAGTACCAAC 240
GCTTATGCCA TTGGCAAAGC AGCAACCAAT TATCAGTTTA CAACCTGCAC CCAAACCTGA 300
G 301

```

## (2) INFORMATION FOR SEQ ID NO:343:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GATTCAGATG GAGATGCCAA GCAGGCCCTT AGGTGAAGGA GTCTGGAGTC TGAAAGCATT 60
TGGGATGGGG ATATAGACTT GAGAGCCATC AGCTTATAAA TAGGACTTGG TCAAGAATGG 120
GTGGCCTCCA TCCTAGATGG ATATAAATAA GAAATAAATA TCAATTTTTC TTCTTATAAC 180
ATTCCTAGGT TTTCATTTT ATGACTTTAA GAAAAATATG AATGACAAAA ATAAACATA 240
AAATCAAATA TATCCGTATT GCCCTTGGG GGACACCATC TCTTGCTCAC TTTACACAGT 300
AAGTGCCATT TCCTTCACCT CCATGGAAAA CATTTCGTAA ATTACTAAGT TGAATAACTT 360
AAAATATAGG ACGGGACATC TCGAG 385

```

## (2) INFORMATION FOR SEQ ID NO:344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

```

GCAGAAATTC TCAGGGAAAC CCCATGCTAG CGGCAACTGC ACCACACTTT GAGGAGAGCT      60
GGGGGCAGAG ATGTCGTCGA CTCAGGAAAA ATACAGGGAA TCAAAAAGCT CTAGACAGTG      120
ATGCTGAGAG TTCCAAAAGT CAAGCAGAAG AAAAAATCCT AGGTCAGACT TATGCAGTTC      180
CCTATGAAGA CGATCATTAT GCAAAAGACC CAGACATTGA AGCACCCAGC AACCAGAAGT      240
CAAGTGAAAC GAATGAAAAG CCAACGACAG CTCTTGCCAA CACCTGTGGA GAGCTCGAG      299

```

## (2) INFORMATION FOR SEQ ID NO:345:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

```

GCATTGGTT CTTTTATAT CTTCTATTTC TCTCACTATA TTCCTGTTTT TCTTTTAATG      60
CTTGACATC ATTAACTCG CTGTTATCCT TGTCTGTGAG TCATCTGGTC ATTTCTGTGT      120
GTTTTTATTA ACTGATTATT CTCCTGTGCC TGGCCACATT TCTGTGCTTT TNGGCGTTTC      180
AGTAACTTCT GATTGGATGT TGGGTATTAT AAAGATTATA TTATTGAGTG TCTGGATTGT      240
GGGTGGTAGT TACTTGTGGA TCAGTATGAT CCCTTGAGG CCTATTTTTA AGCTTCAGCT      300
CGAG                                          304

```

## (2) INFORMATION FOR SEQ ID NO:346:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

```

GAATTCGGCC TTCATGGCCT AGATTACAAC ACGTGTGCCA CCACACCTGG CTAATTTTTC      60
TATTTTATAGT AGAGACGAGG TTTCACCATG TTGACCAGGT TGGTGGTCTT GAATTCCTGG      120
CCTCCAGCCT GGTGACAGAG CGAGACTCCA TTTCAAAAAA AAAAAACAAA CTTTCATGCTG      180
AGAAGTCTGA AGAAAAAATA GATTTTAAAG AGGAAAATGT GTAAGAAAAA TACTTCAGCT      240
TCTGTTACAA AATCAAAATA GAAAAAACA CAAAATTGGT GTTTCCTCGA G              291

```

## (2) INFORMATION FOR SEQ ID NO:347:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

```

GTAACTTTAG CTGTACCTTG CAAACCAGAA CATATGGTCA CCCTACCCTC CGGTCACTTT      60
TTCTTCTTTG TTTCCATTCT TTAAATTTT TTCCCTTTTA AACACACAGC ATTATCTTTT      120
CCTGAGCACC ATTGTCTTTG CAAATGCTCT TGCAATCGGG ATATTTTGA CCTGGCAACA      180
TGCATATTCA GTCTGAACAG TCTCTCTGAA CCTACCCCAA AACCTGGTTT TAGCTTCCAG      240

```

GCAGAAGACT GGCCTCCCTG GCTTGCAACC CCCAAACTCG AG

282

## (2) INFORMATION FOR SEQ ID NO:348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT ATATCAATGC AATTTTAAAT TTTTGTTAAT ATCAACAGCA	60
AAAGCCTAGT GCATTGGGAG ATGTGCAACC TCCCTGAAAA TCTTTTCTGT TTCTGGAGTA	120
CTTCAGGGGT GGCCTCTGGC CCCAGAGCCT TGCCACAGT GCTCCCACCA GCCCCACCT	180
CATCCGTCTG TTTGCAGAGC CTCATCTACA GGTCCCCACG CTGCCTTCTT TACTCACTCT	240
GCGCTTGGCC GTTTTGTTAT TTGGCTTAGT CTACATTGGG CGGAAGTCTG TGTGCACAGA	300
GTGGGTGTTC CTTGAGCCC CTTCCACTCA GAGGGCCACA CG	342

## (2) INFORMATION FOR SEQ ID NO:349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGGCC TCATGGCCTA CAAAGAGCTG GGATTACTGG TGTGAGCCAC CGTGCCCGGC	60
CTGGACATCT GGTTTTAACT AGATGGAAGG GAAGAACATT ATGAATCTTT AAAATACGGC	120
TGTTGCCATT TTTCTCTCTT CTTAACATGC AGCATAGGTG ACAAGCTTTT CTGTCATCAT	180
CATGGAGCAT TCTGAATCAT GACATTTTGG TTTGAGAGTT CATTCTTGAA TTTTCAGTTC	240
AAAATATTGT TTGAATATT ATTCCACATT CAAAGATTAT ATAAGGTCCT GTGCTTTTGA	300
ATCTTTTCA AAAAATTAT TTCTGCCTGC TTAACAAAAA TACTTTTATT TCCCCACAGA	360
GAGTTCAGGA CTTGAGATTA GTTGTGTTC AGCTCACTTA ACTGGATAGA CAATTTGCG	420
TTTTGCAACA CCATAGCTCG AG	442

## (2) INFORMATION FOR SEQ ID NO:350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC AAAGAGGCCT AAAAAATGA AATTCCTTAT CTTGCAATTT TTCGGTGGTG	60
TTCACCTTTT ATCCCTGTGC TCTGGGAAAG CTATATGCAA GAATGGCATC TCTAAGAGGA	120
CTTTTGAAGA AATAAAGAA GAAATAGCCA GCTGTGGAGA TGTGCTAAA GCAATCATCA	180
ACCTAGCTGT TTATGGTAAA GCCCAGAACA GATCCTATGA GCGATTGGCA CTTCTGGTTG	240
ATACTGTTGG ACCCAGACTG AGTGGCTCCA AGAACCTAGA AAAAGCCATC CAAATTATGT	300

ACCAAAACCTGAG

314

## (2) INFORMATION FOR SEQ ID NO:351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

GAATTCGGCC AAAGAGGCCT AGCTACCAGA GTGTGAGAGA CCATTGTCTC GTTGGCTGGC	60
GCTCACGGAC ATGCAGTCAC GGTAGCGGA GCAATCACAA AACTGTAATT TACTTACCAA	120
ATCTCTTCTT TCCGTAGCC TCGCCTGCCT GACTTAGAGA AAGAAAAGCA ATAATTTTAC	180
AGGCATTTTG AGGTGTCTCT TTGGGTCTCT TCTGTTTGAA AGGATATTTG TCGAAAAAAA	240
GAGCAAAACC GTTTAAATA AACTCCCCT GGAAAAAAC CCAAAACACT TGCATCTCGA	300
G	301

## (2) INFORMATION FOR SEQ ID NO:352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGGCC AAAGAGGCCT AGCAAATACA CATTAAATAG AATGCCTAGA AGAGGACTGA	60
TTCTTCACAC CCGGACCCAC TGGTTGCTGT TGGGCCTTGC TTTGCTCTGC AGTTTGGTAT	120
TATTTATGTA CCTCCTGGAA TGTGCCCCC AGACTGATGG AAATGCATCT CTTCCTGGTG	180
TTGTTGGGGA AAATTATGGT AAAGAGTATT ATCAAGCCCT CCTACAGGAA CAAGAAGAAC	240
ATTATCAGAC CAGGGCAACC AGTCTGAAAC GCCAAATTGC CCAACTAAAA CAAGAATTAC	300
AAGAAATGAG TGAGAAGATG CGGTCACTGC AAGAAAGAAG GAATGTAGGG GCTAATGGCA	360
TAGGCTATCA GAGCAACAAA GAGCAAGCAC CTAGTGATCT TTTAGAGTTT CTTCATTCCC	420
AAATTGACAA AGCTGAGCTC GAG	443

## (2) INFORMATION FOR SEQ ID NO:353:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCGGCC AAAGAGGCCT ATAGGCNTCT TTGGCCGGCC AAAGAGGCCT AAAAAAATCT	60
CAGCTATGGT TCATTATTAC TAGCTCAGCT TTAAATTCTT TAAATTGGTT GAATTATTCT	120
CTATGTCAGT TATTTTATT GACCAGTTT GGAATATTTT TGTTCAATTA TCAGGGAGTA	180
TGGGTTAAT GAAGTTGTGG CAGGGATAAA AGAATACTTC AACGTAATGT TGGGTACCCA	240
GCTACTCTAT AAATTTGAGA GACCACAGTA TGCTGAAATT CTGCAGATC ATCCCGATGC	300

ACCCATGTCC C TGTATG GAGCGCCAAC TCGAG

335

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GAATTCGGCC AAAGAGGCCT ACAGAGATTA TATTGGGGTT NCCATTTTGT GAAGCCANAG	60
ACATNTGGTC ATTGGGATGT GNGATTGCAG AATTATTCTT TGGANGCCCG NTNTACCCAG	120
GAGCCTNGGA GTATGCTCAG ATTCGANACA TTTCTCAGAN TCAAGNTTTN CCAGGAGNAC	180
AGTTGTTANA TNTGGGTACT AAATCCACAA GATTTTTTTG ACANAGAAAC AGATATGTCT	240
CNTTCTGGTT GGAGATTAAA GACACCGGAA GAGCATGNGG CAGAGACTGG AATGNAGTNT	300
TAAGAAGCCG GACTCGAG	318

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCGGCC AAAGAGGCCT AGTGGGAATT TTAAATACAA GATCCTGTTG AAAATATTGA	60
TATTCAAAGA AACAAACAGC TTTGGATCCA TAGCCACAAT TTAGGTTTTT CTAGATTAAA	120
ATCAGAAGTG ATTTTATTGT TGGAGATAC ATTAATTCTT TGAAGTCAGA ATAAGAGGCT	180
TGACAATTTA ATTTCTAATT AAGTGACTGA ATAGACAAAG GATCAAATAC AAACAGTAGT	240
GCAGGAAGAA AATAAATTGG AAGAAATAAT TGTTCAACCA GTAGTAATAA TTAAGACCAC	300
CATTTTAAAA TTTTCTATAC ACAAAGAATG AGAAAATATT GTTATTATTA TTATACTTCT	360
TTCTTCTTCA GTATTAGTGG ACCCACATTA TCTCCTGTCA ATTCATTGTG TTTATNATGT	420
GAACCATCTC TCGAG	435

(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

GAATTCGGCC AAAGAGGCCT ACAGGCTCAC ATTGACTACA CACGTTTATA CCAGGCGCCA	60
TGTTCTTTGC CGAAACTCCC GCTCAGAGCC TGGATGATCT GCCCTCACC TCTGCCCTCG	120
TTCCCATCCA CTCTCCCTC CTGCTCTGT TCCTCGAG	158

(2) INFORMATION FOR SEQ ID NO:357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GAATTCGGCC TTCAAGGCCT ACTCTTCTTG GCATATTATT TTCCTGAATT GCTGCCTCTG      60
TTGTTCAAAC CATCCCGGAT TAATGACAAA AACTATCTT ATTCAAACCA AGAATTATCT      120
ACAACCTTCC TTCTCAACTA GTTTNNGCAA GATCATTTC A GTTTTCTTT TTGTGCTACA      180
TCCTGGATTA ATTCTTCAGT TTNGTCTTCT CTGGAATCAC TACCTAAGGC TTATTCCATG      240
TTTCAAGTTT TTTGTTTTTT GTTTTTTTT ACTTTGATGA GTATGTTTAC CAACGCTCTC      300
GAG                                                                                   303

```

## (2) INFORMATION FOR SEQ ID NO:358:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

GAATTCGGCC TTCATGGCCT ACAAAGTGTT GGAATTACAG GCGTGAAC TA CCGTGCCCGAG      60
CCTTTTTTTT CATAGCAGTT TTATTAAGTT GTATTTGCCA TACCACCCAA TGTATCCATT      120
TAAGCACCTG ATTCAGTGGT TTTTCATGTA CTCATGGAGT TATGCAGCCA CAATCTTAGC      180
GCATTTTCAT TACCCAGAA AGAACTGTA CCCATTATGC ACCCCGTTCC CNTCNTCCGG      240
TCNTGGCAAC CACGAGTGTA CTGTCTGTCT TCATGGATTT GCCTATTCTC GACGTTTCAT      300
TGGGATGAAA TCACACAGTG TATGGCTTCC AACTTTTACT GTGCTGTTGT CAAGGTTTAT      360
CTATGTGTTG GGTGCAGCCA CCCCTTGGTA TCCACAGGGA TTGGACCCAG GAGCCTGCAC      420
CGATCCCCTG CAGGGATGCC TGTGTCCAC AGTGCCCCCT GCAAAACTCA CTGATATGAA      480
GAGTCGGCTC GAG                                                                                   493

```

## (2) INFORMATION FOR SEQ ID NO:359:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

```

GAATTCGGCC TTCATGGCCT AGTTAACATG ACACAAAATC TTTACCTGCA GTTCTAATAT      60
TTTGCAAGGC TGAAGTCCAT ATTTACAAC TCTTAGATC ATCTCAATCT GATTATTTAA      120
CTATTCTCTC TAACTGCTAG TCCAGCCCCT AAAACTGCAT TTCTCTGCTC CTCCAAAGCT      180
TAGTGGCTTA TTGAAGTCCA TATTTGCATT GTGACAGAGC CAACTCCCAA GAATGGATTG      240
CCACTCAGTG TAATGCAATA GGAGCACTTT AATTTTATCT CCATTTTCTG GACCCAGTGC      300
ATCATTCTAG CCTTTTTTTC TTGGAATGAA GTCTGGCTGA GAATGATGAT CCATTAGTAA      360
GAATTACTTA ATAAATCAAC TCTTGATTAT GAGTGGCAGA AACTAAAGC CAGGCTCGAG      420

```

## (2) INFORMATION FOR SEQ ID NO:360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

```

GAATTCGGCC TTCATGGCCT AATGTCACCA CTGTGGAAAA CCATATAGGT CGAAGGCTGG      60
ACTTGCATAT CACCTGAGGT CAGAGCATGG GCCTATATCC TTCTTTCCAG AGTCAGGACA      120
GCCAGAGTGC TTAAAGGAGA TGAACCTAGA GTCAAAGAGT GGGGGCCGAG TTCAGAGACG      180
TTCTGCCAAG ATAGCTGTAT ACCACCTACA GGAGCTGGCC TCTGCTGAAC TGGCCAAGGA      240
ATGGCCCAAG AGGAAGGTGC TTCAGGACCT GGTACCTGAT GATCGAAAAGT TAAAATATAC      300
TCGTCCAGGG CTCCCTACCT TCAGCCAGGA AGTACTACAT AAATGGAAGA CTCGAG          356

```

## (2) INFORMATION FOR SEQ ID NO:361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

```

GAATTCGGCC TTCATGGCCT ACATGATGAA ATGTTGGCTA AAAGAGTCAC CCTAATATTA      60
ATAAAATGTT TTATTCTTCA TGTGACTAAA TCAGTGTGCA TGCAAGAAAA AGAAAGAAAA      120
AATGCTTAGA TTCCTTTTTT AAATTATCTC CAGAAATTTCT AATTTTTATA AATTAAGGAC      180
CAACAAATCC CATTTTGTTC TCACGTTTGA CATTGTGTC TTTGACTTAA ATAACCTCTC      240
CACTCTTTAT TTTCTATTG GTGGTGATTT GAATAATTTT TCAGAAAATA TGTACTTTCT      300
GATAAATTGT AGTGTGTCAG TAATGAAAAC TGCTCTATGG TGCTCCCTC GAG          353

```

## (2) INFORMATION FOR SEQ ID NO:362:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GAATTCGGCC TTCATGGCCT ACGAACTACT CTAAGTAATG GGCCAAGTCA TGAGCTGCAC      60
AAAGGCCCCC AAGACCCAGA CGGGTTTAAT GTTAAGCAAA ATGCCGCCTG GTCTCAGGTA      120
GACACTCAGC CACCGCTAGC CCCAGTCAAC TGTCCCATGG GAAGGCAGAA GGCCCGGTGT      180
TGCCAGGTCT TAAGTTTTC GAGGAAATC CTAAACGAT GGTGTTTCAC TATAATGGAT      240
TCATTTTAT GTTTTATAAA TCTCTATGTT CATGTACTGG TATTAGTACT TTTATGTGAT      300
AAAATCTTTT TTTTAAACAT TGGTAATTCA AAAACACAAC ACCCACATAC AGTGAGGACC      360
AAACAAAACC CGTCTGCAAG CAGGCTCTCT CCGAG          395

```

## (2) INFORMATION FOR SEQ ID NO:363:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

GAATTCGGCC AAAGAGGCCT ACAAAGGACA GCCCTGTCTG CACTGAGT TACTGTGGAT    60
TTTTAAGAAA CTCGCTAAA GAATTAGGC ATTTCTGATT CAGTTAAAGG ATTGCCAATT    120
CATCAGTCCC TGAACTAGA GCAATCTCAA CAGGACAAGA AAAGAAAATG GGCTTTTAA    180
GTCCAATATA TGTCTTTTC TTCTGTTTG GAGTTAGAGT ATACTGCCAA TATGAAGCTT    240
ACCGATGGGA TGACGATTAT GACCAAGAGC AAAATGTCGA G                281

```

## (2) INFORMATION FOR SEQ ID NO:364:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT AGTGCCACTG CACTCCAGCC TGGTGACAGA GTGAGNCTCC    60
GTCTCAAAAA AAAAAAAAAA AACTCAGCTT CTCAGAGAG ATAAATTTGG GGGAGGAGCC    120
CAGGGCCACA TACCAAGCTT TGGGACATGG TGCCTCATGC TCTCTGGGAT TGCAGACCAT    180
CCAGGTCTGT CTCGCCCCCT GTTAGTGAC ATATATCCAC TCACATGTCT TCCCTCAGGC    240
TATCGGGCAG GGGGACTTCA CCAGGGGGTT TATGGATAGG CTTCAAGAGG GTCTGTGAGC    300
CCCCAGAAAT TGTGTGTGAG ACTGAGTATG TGTCTTTT TCCAGGAAAT TCTCGAG      357

```

## (2) INFORMATION FOR SEQ ID NO:365:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

```

GAATTCGGCC TTCATGGCCT ATTACAATAT GCTTAAAGCT CAAAATGATC GAGAAACACA    60
AAGTTTGGAT GTCATATTTA CTGAAAGACA AGCGAAAGAA AAACAAATCA GAAGTGTCTGA    120
AGAAGAAATT GAACAGGAAA AACAAGCAAC AGATGACATT ATCAAAAATA TGTCTTTTGA    180
AAACCAAGTC AAGTACCTAG AGATGAAAAC CACAAATGAG AAAGTGTAC AGGAATTAGA    240
TACACTTCAA CAACAATTGG ATTCACAGAA CATGAAAAAA GAGAGCCTGG AAGCAGAAAT    300
AGCTCACTCC CAGGTGAAAC TCGAG                325

```

## (2) INFORMATION FOR SEQ ID NO:366:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

```
GAATTCGGCC TTCATGGCCT AGTGAATTGA GTTTTGTAAA CTCCTTAGC ATATCACACA      60
ACACTAATTT TCCAATCTCA ATATGTGGCT GTAGAGTGTT TAATGTTTAC TTTCATATCG      120
CTTTTCCATA GTAGTGCAAG ACCTCAGTTT AGCTTGTTTA CATTATTTGC AGATTTACTT      180
ACAGTGTAAT ATTTATTCTT GTTTTAAATA GTGTTTGCAA TAGGAGAAAA TCATATGATC      240
TTAAGCATAT ACACCAAAGG TAAGAAAGGA AGCCACTATT GTATCTTTTT GATGAATTCC      300
AGATGAGCTG GGATCAAATT GAACTGCTTA GGCAGAAATT TAAGAGACAA GTAGAAGTGG      360
TGCAGAAAGA CATTGTGACT GCAATGTCCT ATTTACAGCT ACTGCCGAGA GGAGAACACT      420
CCCAACATGA CAAAGAGTTC ATCAGCTTGA ATGTTAACTT TTGAAAACAA TTAATTGAGC      480
CACTGCACCC GGCCAATCTA GTGAATTGAG TTTTGTAAC CTCCTTAGCA TATCACACAA      540
CTACTCGAG                                     549
```

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 481 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

```
GAATTCGGCC TTCATGGCCT AGGAGGCGGA GGTTCAGTG AGCCGAGATC ACGCCATTGC      60
ACTCCAGCCT GGGCGACAAC AGCAAGACTC CATCTCAAAA AAAAAAAGTG AGATCCTGCC      120
GATGGGCCCT TCCTGTCCAC CTGTGAGGAA AACCTGCAAA AGGTTCTTGT CGCACCATTG      180
GAGCCAGTTT TTCCCAAATG ACACCCATAC CTGATTTTCC TTGTTCTTCT AAGACAGTTT      240
TAATTAGGAT AATCTCATAA GTGCTACATT TTCAGTGAAT TTTTCAATAT AGTGGCCCAT      300
GTTCTTTCTT TTTTTTTAAA GTCTTTTCC TCTGGTAGCA CATGTGATTT AATGCTTGCT      360
TTCTGAATT GTAGAAATAA AAGGAAATCA CAAGTATTTT CCAACAAAGT GGAAGTGGG      420
CCGAAGGGTG CAGAAAAAAA CTATAGAAAT TAGTTAAAAA TTAGGAAGGG GCAGTCTCGA      480
G                                     481
```

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 285 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

```
GAATTCGGCC TTCATGGCCT ACCAACTCAG AAGGGAATGG AATGTGAAA AAAAGAAAGA      60
AAACCTGAGT AACTTTTCCT AAAAAAGTCT AGCTGTTCTC AGTTTGTGGC ACCAAATGGG      120
GAGCAGGGAA TGTTCAGTC GCAACTGACT AATTAGCCCA ACCCTNATTT ATTGATAATA      180
ATAATGATAA ATAATAATGC TAGCTAACAC TTAAGTAGCA AATACTAGGT ATTATGTGAA      240
ATCATTCTCT TGTATTAAT CACTTAATCT ACACAGCAAC TCGAG                                     285
```

(2) INFORMATION FOR SEQ ID NO:369:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

```
GAATTGGCCT TCATGGCCTA NGTGTGGATA GTGGAGGCAT TGGTAGCCAG AACATGTCAC      60
TTTATGACAG CATATGGACA GCAATATGGA AGCCCAGCAT GGTGGTAAA AAATGGGGCA      120
GCCTAAGGTC AATGACTTTT GGCTGAGTCT GTGAAGATCT CAAAGCTTGG TGGTTTTTAG      180
CATAGCCTTT ATACCATACT TAACTCCGGG TAAGGACCAG GACCACTGTA GCGACCAATT      240
GATTGACAGA GTAAAGTATG TGGGTTTTTT TTTCCCCCA ACTGGGCTGA TTCTCTTAGA      300
ATAAAAATTG TATACCATTA TATTATGTTA ACTTGATCAC AAAGAACAAA ATGTTATTTA      360
TTAATAATAT AGCATTGTCA TCTGTTTGAT GAATTTTCTT GATTTAATGC TTGTTTAGAT      420
TCAGTAAGCC ATTCTCAGGA ACTATAATAA ATGCTTCTTC CAACTTCTCG AG              472
```

(2) INFORMATION FOR SEQ ID NO:370:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

```
GAATTCGGCC TTCATGGCCT ACGAGTGCTT GCTGGAATCG TTTACCCTNG TTAATTTTTA      60
TCATNTCCTC TTTATGAGCA TGATATGGCT TCAGCTGTTC CACTTTGATC CAGGCATGAT      120
CTTCTGTTCC AAAAAATTTC ACAAAGAAGC ATTTCTTTCC GCGAGGTTTC TTCAAGTCCT      180
TTGGTGGATT AACAACTCTT CCTGGCCAAG GAGGATATCG CCCGAGTTTC CCCCACACCA      240
AGTCGCCGAG CCGCAGACTC ACAGCCGCCA TCTTACCACC CAACCACCGC CGACGCACGG      300
GCCGCCG                                           307
```

(2) INFORMATION FOR SEQ ID NO:371:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 414 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

```
GAATTCGGCC TTCATGGCCT ACAACGATCT TGTCTTCTTC TATCAGGTTT GCGAAGGTGT      60
TGCGAAGGCC AGCCATGCCT CCCACACAGC TGCCCAGGCT GGGCTTCCTG ACAAGCTTGT      120
GGCTCGTGGC AAGGAGGTCT CAGACTTGAT CCGCAGTGGA AAACCCATCA AGCCTGTCAA      180
GGATTTGCTA AAGAAGAACC AAATGGAAAA TTGCCAGACA TTAGTGGATA AGTTTATGAA      240
ACTGGATTTG GAAGATCCTA ACCTGGACTT GAACGTTTTT ATGAGCCAGG AAGTGCTGCC      300
TGCTGCCACC AGCATCCTCT GAGAGTCCTT CCAGTGTCTT CCCCAGCCTC CTGAGACTCC      360
GGTGGGCTGC CATGCCCTCT TTGTTTCCTT ATCTCCCTCA GACGCAAACCT CGAG              414
```

(2) INFORMATION FOR SEQ ID NO:372:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 376 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

```
GAATTCGGCC AAAGAGGCCT ACTGGATGGC ATCTACTTCG TATGACTATT GCAGAGTGCC      60
CATGGAAGAC GGGGATAAGC GCTGTAAGCT TCTGCTGGGG ATAGGAATTC TGGTGCTCCT      120
GANCATCGTG ATTCTGGGGG TGCCCTTGAT TATTTTCACC ATCAAGGCCA ACANCGAGGC      180
CTGCCGGGAC GGCCTTCGGG CANTGATGGA GTGTCGCAAT GTCACCCATT TCCTGCAACA      240
AGAGCTGACC GAGGCCCAGA AGGGTTTCA GGATGTGGAG GCCCAGGCCG CCACCTGCAA      300
CCACACTGTG ATGGCCCNAA TGGCTTCCCN GGATGCAGAG GAGGCCCAAG GACAAAAGNA      360
AGTGAGGNAG CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:373:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 345 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

```
GAATTCGGCC AAAGAGGTCC TGTAAGTATG ACTATTTAAT TTATTCTTT TCACAATATA      60
AAAAGCACAT GCGATATTTT GAAAGACTAT TAAAGGTGGG GACAAGAGGT TATTTAAATC      120
TATGTTTGGA TGCAACTTTT ATGGCTTAAA CTACAAAGAA TTATCCTTTT TATATATTAA      180
ATGATTGTAT AGTTCTTTTA ATACTGTTT TTGATACAAG TGTGAAATNC TTAAAGAAAA      240
TGGCAAACAT CACTAACAAC CATTACAATT CTAATAGCTA ACTTTTCTGA GCCATTACTT      300
GGAACCATGC ACTGTTTAAA ATGCCTCACT TGGCCAATGC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:374:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 507 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```
GAATTCGGCC AAAGAGGCCT AAAATGCGGA GTTATAATCC AGAAGGGGAG TCTTCAGGGA      60
GATACCGAGA AGTAAGGGAT GAAGATGACG ATTGGTCCTC TGATGAATTC TGAAGATAAT      120
CTCCTAAATC ACTGACGTTG AGATGTCATC ATCTTACATC AGACTTTCTA ACTAGTATCA      180
AGATCAGTGT CAGATATTGT TGAGGGAAGT AATTTTATAA AGTTACACAA AGGTAGTTAT      240
AAAAAAGGCC CAGTTTGTCT TTCAGAAGGT GACTTTTCATG TGCTTGAAAA GTTTAATATT      300
TGAATATTGT GTTTAACCAC ATGGTATTAA AATTTTGCAA TATATTGTGT ATTGGTCTGA      360
TATTTTAGTA TATAGTAGAA CATACTTTT TTTTCTTTAA GCCAAATGAA AAGAGGTAAC      420
TTTGCTTTTT TCCTTTTTCT TACCTATCAA ATAGCATTTA TTACATGTCT TTCAGTGAAA      480
TACTTAGTTG TTCCAGGCAC GCTCGAG
```

## (2) INFORMATION FOR SEQ ID NO:375:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GGAACGAATA GAAGTGTGTTG TATCTGTGGG TTNGACACAC TACTGAATCA CAAAGTCTTT      60
GGAATAATTC TCAAAGCCA TCACTTTTAG CCCACTTTCT CATTCAATTAA TGCTCTATTC      120
TTTTCTAGC ATGTCTAGCA GAATCTCTT GAATCTTGC AGTGAATTGG TGCTCCTTAA      180
ATACCTGCTA TTTTGGGAATA GTTTGACTT AAATACATTT TCCTTTTCTC CCAGTTGCAA      240
AATGTCAGGG CTGACAACTG AAAGGGCTTC TGAAGATTGT CAGTGTTCCTC ATATTCAGAT      300
AGGTAGCAAA GAATCTGACA CATTGGTAT AATAAACCCA CTCGAG                        346

```

## (2) INFORMATION FOR SEQ ID NO:376:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCGGCC TTCATGGCCT AGGATGAATG ACCTTAAAGA TCGAACATGA ATAAGAGACA      60
TCATTTACCC TCAAAGAAAC TAGAGTCTGA TTGGGCAGGG AGGAAAAGGT ATTAATAATTA      120
TGTCTTTCTG CATTGTGTGG ATTTGAAGTT TGTTTTTGT TGTTAAGAGT CTTATTATTA      180
GGATAATGAC ACTGTTTTTT CTTTATTAAG TTAATTGTGT GGCAGTTAAG ATGATTCTGG      240
TGGCTCTTAA CATTTTTTTT TTCTCCAGTC GGAACATGC CCTGTGTGCC GCCGTCATTT      300
CCCACCTGCG GTTATTGAAG CATCTGCAGC TCCTTCCTCT GAGCCTGATC CTGATGCCCC      360
ACGGTCTCGA G                                     371

```

## (2) INFORMATION FOR SEQ ID NO:377:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

```

GAATTCGGCC AAAGAGGCCT AGGAAGTGT CTGTTGAAAA TACCCATCCA ACAGTTTCTT      60
ACTATGCTCA TCCCCAAGTG GCATCCTACA ATACCTACTA CCATAGCCCT CTCACCTGC      120
CACCATATTC TGCTTATGAC TTTCAGCATT CCGGTGTCTT TCCATCCTCC CCTCCCTCTG      180
GACTTTCTGA TGAGCCCCAG TCTGCCTCTC CCTACCCAG CTACATGTGG TCCTCAAGTG      240
CACCGCCCAA AACTCGAG                        258

```

## (2) INFORMATION FOR SEQ ID NO:378:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

```
GAATTCGGCC AAAGNGGCCT AATATAACTT AGCTGCTATT TACAACACTA GAAATTTAGT      60
ACTTTAAGTA ATTTACATC  TATGATAACA TTGTTACTT  TATTTTAAAT GATTTTTTTA      120
CAGTAGTTAT GACAGTAGGA TGGTTATGGA ATTGGAATTT AACTCCCAA  CTAATGAGCT      180
TAAGCTGCTT GGAATATTAA TTATGTAGTT TTTACATTCC ATTTTAAAC  AAAAAGTTAG      240
NAAAGGTGCT GGCATTCTGA GGCCTGCAAT TAGGCCACAT AGCAGAAAGT TGCTCCTTCC      300
TTATCTGGGT GAAATATTTT ATTTTGCAC  TTTGAGTCAT ATCCCACCC  CTGTATAAGC      360
TACATAGGAG CCTGAATGAA TTGGGTAGGA AAGGAAATTA TGCAAACAAG TCTCAGCTAG      420
TGCTGAATGA CTCGAG                                     436
```

(2) INFORMATION FOR SEQ ID NO:379:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 535 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

```
GAATTCGGCC AAAGNNGCCT AGCACATGCG TCCCCGCGT TGTCTCTTTC TCCTTTCCAA      60
GTTCGTGNCCT CTAAGGAGAT GGAAGTATTC TAAATTTTCC TACTTCTAAT TTTTACTATG      120
CAACCAGCAA AGGCGGGAAG GTTGCAAGGA AAATTGTCCG GTCTTTCACA ACTAAGNNGG      180
AAATTACTTC TCCTATGTTT TTATCAAGA GTTGTCTTTA AACTGCGCTG CCGGCTTTCC      240
CTTTTAACTT TTAGGATTAT AGTTAAGGTT ATGGAAAGTA GTCATTCAAT AGTTCAGTAC      300
GTTTCATATAA GTTCTCTAAC ATAGAAGAAA ACTCAGTCAC CAGACAGTGA AGTCATTTAG      360
CAGTGGTTAT TGGAAGATAA TCCACAGTGA TGGTAATGGA ATACTGGAAA CNCATCCTAA      420
ATAATCTGTA ATTATTATTA TTATTATTTT GGGACAGNGC GAGGCTCCGT CTCCAAAAAT      480
AATAAATAA AATAAATAA TAAATAAATA AATAAAGGAT GGTGCACGTC TCGAG          535
```

(2) INFORMATION FOR SEQ ID NO:380:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```
GAATTCTAGN CCTGCCTCGN GTCGCACCCA TGTCATTCG TTCCTTCCTT CCTTCCTACA      60
TTCTTTTTTT TNCCTTCTT CTTCAGGGTC TCACTCTGTC ACCCTGGCTC GAG          113
```

(2) INFORMATION FOR SEQ ID NO:381:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 660 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```
GAATTCGGCC AAAGAGGCCT ACACACATCG TTCATGTACA TGATCGCCGG ACTCTGCATG      60
CTGAAGCTCT ACCACAAGCG GCACCCGGAC ATCNACGCCA GCGCTACAG TGCCTACGCC      120
TGCTTGGCCA TTGTCATCTT CTTCTCTGTG CTGGGCGTGG TCTTTGGCAA AGGGAACACG      180
GCGTCTGGA TCGTCTTCTC CATCATTCAC ATCATCGCCA CCCTGCTCCT CAGCACGCAG      240
CTCTATTACA TGGGCCGGTG GAAACTGGAC TCGGGGATCT TCCGCCGCAT CCTCCACGTG      300
CTCTACACAG ACTGCATCCG GCAGTGCAGC GGGCCGCTCT ACGTGGGACC GATGGTGCTG      360
CTGGTCATGG GCAACGTCA+ CAACTGGTCG CTGGCTGCCT ATGGGCTTAT CATGCGCCCC      420
AATGATTTCT CTTCTACTT GTTGGCCATT GGCATCTGCA ACCTGCTCCT TTA+CTTCGCC      480
TTCTACATCA TCATGAAGCT CCGGAGTGGG GAGAGGATCA AGCTCATCCC CCTGCTCTGC      540
ATCGTTTGCA CCTCCGTGGT CTGGGGCTTC GCGCTCTTCT TCTTCTTCCA GGGACTCAGC      600
ACCTGGCAGA AAACCCCTGC AGAGTCGAGG GAGACAACC GGGACTGCAT ACCCCTCGAG      660
```

(2) INFORMATION FOR SEQ ID NO:382:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```
GAATTCGGCC AAAGAGGCCT AGTGTGGGA GCTGTGGGCT GTGCCCTTCC AGTCCCCCAC      60
AGCAGTGCTG TTGCCCCAAG ATCTCCTAGC GAGAGACCAG GGGCTACTGC CAGGTGACAG      120
AAAAGGGGAA ATCAGTTCCG CTATACCCAC AGCTCACCTG GCGGCCTGGG GCCTGCACAG      180
GGCCTGGTTG AGGCAGTGA CCCCATT+TTT GGGCCGCTCTG TGGAGTTGAT GTTCTGCCA      240
GCTGGTCCCT CTCTGTCTTC CCTGGAACTT CACCTGCAGT TTGATGCCTG AGT+TAA+AATT      300
GTTCTTCTAA ATAATTCAT GTAGACTTTC TGT+TTT+AGC TATGTAAAAA CTTCTGAGAA      360
ACTTGGAGAG TCTCGAG                                377
```

(2) INFORMATION FOR SEQ ID NO:383:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```
GAATTCGGCC TTCAATGCA+ ACTGGGCGGT CTTTGCAGCA ATAACAATAT CTGCTCCATC      60
CTTTGCTGCT TTCAATGCAA TAGCTTTGCC AATGCCACGG CTTGCACCTG TGATA+AAAAAC      120
TGTACATCCT GCCAGCCTCC CGGTGTTGGG TAACATGACT TTCGTAGATC AGAGGAGGCG      180
GCGGGCGAAG CGCAGCTCGA GCGGGGAGC GCGCGTGCCT GTGGAGATCC GCGGAGGCCG      240
ACAGGATTCT TTGGCTGCCG TCCCGCTGC TGTGCATTGG GTTAAAAACG ACAACCAACT      300
CGAG                                304
```

## (2) INFORMATION FOR SEQ ID NO:384:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

```

GAATTCGGCC AAAGAGGCCT ACTTATTTTA CACAGCTTGA TTAAGGTCTA TGTCGGTATA      60
ATTTTTTTTA TGAGTCTNAC ACGTGGGATT TGTTGAGCTT CTTGAATTG  TATGTTTATA      120
CAAATTTAGG AATTTTTTTC ATCCATTATT TATTTGAATA TATTCTCTGT CTTCACTGTC      180
CTTTGAGGAC TCCAATTACG CATATACCTA ATTGCCTGGA GTTGTCCCAT AGCTTACTGA      240
TGCTTTGTTT ATTTTTTTCT TTCTTTTTTT CTCACCATGC TTAGTTAGG  ATAGTTTTTA      300
TTACTGTTTT TTTAAGTTTG CTAATCTTTT CTTNCAGCAT GCCAGCTCGA G      351

```

## (2) INFORMATION FOR SEQ ID NO:385:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

```

GAATTCGGCC AAAGAGGCCT AGCGTCTTGG ACATGCCAGG AATAAAAAGG ATACTCACTG      60
TTACCATTCT GGCTCTCTGT CTTCAGGCC CTGGGAATGC ACAGGCACAG TGCACGAATG      120
GCTTTGACCT GGATCGCCAG TCAGGACAGT GTTTAGATAT TGATGAATGC CGAACCATCC      180
CCGAGGCCTG CCGAGGAGAC ATGATGTGTG TTAACCAAAA TGGCGGGTAT TTATGCATTG      240
CCCGGACAAA CCCTGTGTAT CGAGGGCCCT ACTCGAACCC CTACTCGACC CCCTACTCAG      300
GTCCGTACCC AGCAGCTGCC CCACCACTCT CAGCTCCAAA CTATCCCACA TATCTCGAG      359

```

## (2) INFORMATION FOR SEQ ID NO:386:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

```

GAATTCGGCC AAAGAGGCCT ACTACATGTA AAACACTTTT ATTCATTAAA AAGAAAAGT      60
ACTGGCTTGG ACCTACAAAT TAGTTTCATT ATTTGTTAAT GTTGAAAGC  CATTAAAAGA      120
TGAATATTAA GGTTTCTTTA TACTCAATAC TTGTAGTTTT GTTTGGGGGA ATGAGAGGAT      180
GCCCTTGGTA CCTTTGTGAG GCCTCTCCAC TGAGGGTCAA TCATGACTTC TGTTTAAAC      240
CAGCCCATCC CATCTTCTCC AGCTGCTCTC CTTATGTCTT GCTTCTCTCC CCTCCAACCT      300
TCTCAGCACC AGGACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:387:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

```

GAATTCGGCC TTCATGGCCT AGTGGGAGCT ATTTTCTTTT TTGTGCATAT AGATATTCTT    60
TAAATGAAGC TGCTTTCTTG TCTTTTATTT CTAAAAGCCC CCTTATACCC CACTTTGTGC    120
AGCAAAGATC CCCGTGCAGG TCACAGCCTG ATTTGTGGCC AGGCTGGACA AATTCCTGAG    180
GCACAACTTG GCTTCAGTTC AGATTTC AAG CTGTGTTGGT GTTGGGACCA GCAGAAGGCA    240
AACGTCCAGC CAACACACAG GACTGCAAGA GGTCTCGAG                                279

```

## (2) INFORMATION FOR SEQ ID NO:388:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

```

GGTAGAAGCA GGAGGTTTTC AACCTAGTCA CAGAGCAGCA CCTACCCCTT CCTCCTTTCC    60
ACACCTGCAA ACTCTTTTAC TTGGGCTGAA TATTTAGTGT AATTACATCT CAGCTTTGAG    120
GGCTCCTGTG GCAAATTCCC GGATTA AAG GTTCCCTGGT TGTNAAAATA CATGAGATAA    180
ATCATGAAGG CCACTATCAT CCTCCTTCTG CTGCACAAG TTTCTGGGC TGGACCGTTT    240
CAACAGAGGC TCGAG                                255

```

## (2) INFORMATION FOR SEQ ID NO:389:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

```

GAATTCGGCC TTCATGGCCT AGGCCCACAT AGAAGAAATG AATGAAAAGA CTTTAGAAAA    60
GCTTGATGTG AAGCAAACAG AACTAGAATC ATTATCTTCT GAAGTGTGAG AAGTATTAAA    120
AGCCCGTCAC AACTAGAAG AGGAACCTTC TGTTCGTAAA GATCAAPCAG ATAAAATGAA    180
GCAGGAATTA GAGGCAAGA TGGATGAACA GAAAAATCAT CACCAGCAGC AAGTTGACAG    240
TATCATTAAG GAACACGAGG TATCTATCAA GAGGAACCTG AG                                282

```

## (2) INFORMATION FOR SEQ ID NO:390:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGATAGAGCT CAAAAACATG GCATGGATGA ATTTATCTCT    60
TCCAACCCCT GTAACCTTGA CCACGCTTCC CTCTTTGAGA TGGTACAACG CCTTACTTTG    120
GATCACAGAC TTAATGATTC CTATTCTTGC CTGGGCTGGT TCAGTCCTGG CCAGGTGTTT    180
GTACTAGACG AGTATTGCGC CCGAAATGGA GTCCGGGGGT GTCACCGACA TCTCTGTAC    240
CTCAGAGACT TGCTTGAACG GGCAGAAAAT GGCGCCATGA TCGACCCAC CCTTCTTCAC    300
TACAGCTTTG CTTTCTGTGC ATCCCATGTC CATGGGAACA GTCAACAAAT GCATGTGTAC    360
CTTAGTGGGC TGCCACCAA TACAGACCAC GGTTCCTCCC TATAGTGAGT CGTATTAATT    420
TCAGAGGAGT ATTTAGAAGA GAAGCTGAAG CTGTCGAG    458
```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATGGGACT CCAAGCCTGC CTCCTAGGGC TCTTTGCCCT CATCCTCTCT GGCAAATGCA    60
GTTACAGCCC GGAGCCAGAG GAGCGGAGGA CGCTGCCCCC AGGCTGGGTG TCCCTGGGCC    120
GTGCGGACCC TGAGGAAGAG CTGAGTCTCA CTTTGGCCCT GAGACAGCAG AATGTGGAAA    180
GACTCTCGGA GCTGGTGCAG GCTGTGTCGG ATCCCAGCTC TCCTCAATAC GGAAAATACC    240
TGACCCTAGA GAATGTGGCT GATCTGGTGA GGCCATCCCC ACTGACCTC CACCTCGAGG    300
TTCTCCCTAT AGTGAGTCGT ATTAATTTTC AGAGGAGTAT TTAGAAGAGA AGCTGAAGCT    360
GTCGAG    366
```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GGCGGGTGGG GGTTAATTAT CTGAAACCTA CTAAAACGGA CTACAGTTAT CTCTAGGCAA    60
TGCTGTTGGA GTGTTTCCTG CAAATGCATT TCACTCATT TTTTGTGATT ATTTTATAAG    120
TATACTGGGG CAAAAATTTT ACATTCTAAA TTGTTCTTAT TTATTATTTT TATTATAGAT    180
ATATGAGGAT ATTACTTACT CTATTACACA TATAATTTAT CTTTAAATT TTCAAGTGAG    240
TTCTACAATT AACTTTATCA TCTAAATTCT CATTACAGAT AGCATTTTAA TGTCCAGAAA    300
GAAAAAAGG TTTTATTG TTATATGTGA AACCATAAAA ATATTACCAG CTTGTGGCCG    360
GGCGTGTGG CTCACGCCCTA TAATCCAGC ACTTGGGAG GCCGAATCAC CTGAGGTCAG    420
GAGTTCAAGA CCAGCTGGC CAACATGCGG AAACCCCGTC TCTACAAAAA TGGAAAAATT    480
AGCCCGGCAT GATGGCAGGT GCCTGTAATC CCAGCTACTC GAG    523
```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs

(i) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GAATTCGGCC	TTCATGGCCT	ACCCAGATGA	AACTTTTGGG	GGGAGAGTGC	CCAGACCAGC	60
CTTTGTCCAC	TATGACAAGG	AGGAGGCATC	TGATGTGGAG	ATCTCCTTGG	AAAGTGACTC	120
TGATGACAGC	GTGGTGATCG	TGCCCCAGGG	GCTTCCCCCC	CTGCCACCCC	CACCACCCTC	180
AGGTGCCACA	CCACCCCCTA	TAGCCCCCAC	TGGGCCACCA	ACAGCCTCCC	CTCCTGTGCC	240
AGCGAAGGAG	GAGCCTGAAG	AACTTCCTGC	AGCCCCAGGG	CCTCTCCCGC	CACCCCCACC	300
TCCGCCGCCG	CCTGTTCCTG	GTCTGTGAC	GCTCCCTCCA	CCCCAGTTGG	TCCCTGAAGG	360
GACTCTGGT	GGGGGAGGAC	CCCCAGCCCT	GGAAGAGGAT	TTGACAGTTA	TTAATATCAA	420
CAGCAGTGAT	GAAGAGGAGG	AGGAAGAGGA	AGAAGAGGAA	GAAGAAGAAG	AGGAAGAAGA	480
GGAAGAGGAG	GAAGACTTTG	AGGAAGAGGA	AGAGGATGAA	GAGGAATATT	TTGAAGGGGT	540
TACTCGAG						548

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 577 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCGGCC	TTCATGGCCT	ACTTACTAGG	AATTAAAAGA	CGGATTTCGA	AGGAGATTCA	60
GAGGCAGCAA	GCACTACAGA	AGTCAGAACT	CCAGCACCAT	CTGCTCCGTT	TCTTGAAGTT	120
TGCTGAACGA	GGACTCACAG	CTGCAACGTG	GGGTGATTGT	ATTGATCAAA	ACCCACTGGG	180
AAGGACAAAG	AGTTTGCCCG	CTTTCGGGGA	TCCAAGGGAC	TGTGGCGACC	GTGCCTCTGT	240
GCCAGCGTCC	CAGGAAGGAA	GCCAACCCTG	AGCGAGCCTG	TCCTCTGTGG	CAGGTCCACA	300
CGGTGTGGGT	GGGCAGGGCT	TGGACCCCCG	TCTCCATGGC	AGGTCCATAC	AGCATGGGTG	360
GCAGGGTTTG	GACCCGCCCA	GCAGCACCAC	GGACCCGAGC	CACTCTCGGG	GGCAGACGTC	420
AGAATCCGTT	CCTGAGCAGC	TCCCGTGCCC	TGGGGGCAGT	CACAGAGCCC	CCCAACACCC	480
CCGTGCTCTG	CACCAGCCTC	TCCCTCCACA	CCCGAAGCAG	GCGTCCATCT	GTGTCCTCCT	540
GGCAGCCCCCT	CAAACACACA	CCACCCCAT	TCTCGAG			577

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 415 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCGGCC	TTCATGGCCT	ACATCTTCAT	TGCTGAGGTT	GCAGCTGCTG	TGGTCGCCTT	60
GGTGTAACCC	ACAATGGCTG	AGCACTTCCT	GACGTTGCTG	GTAGTGCTTG	CCATCAAGAA	120
AGATTATGGT	TCCCAGGAAG	ACTTCACTCA	AGTGTGGAAC	ACCACCATGA	AAGGGCTCAA	180
GTGCTGTGGC	TTCACCAACT	ATACGGATT	TGAGGACTCA	CCCTACTTCA	AAGAGAACAG	240
TGCCTTTCCC	CCATTCTGTT	GCAATGACAA	CGTCACCAAC	ACAGCCAATG	AAACCTGCAC	300

CAAGCAAAAG GCGACC AAAAAGTAGA GGGTTGCTTC AATCA TGTATGACAT 360  
CCGAACATAAT GCAGTCACCG TGGGTGGTGT GGCAGCTGGA ATTGGGGGCC TCGAG 415

## (2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 286 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC TTCATGGCCT ACTAAAAGAT ACTTCAAAGT GACAAAAACG TGTCCTTCC 60  
 CCACTTAGAG ACAATGATTA ACAGGGCCCT ATATGTTCTT ACCACATACA GAGGATGCAT 120  
 TTATTTTGGC TCTATGACAC TTGCAAAAT CTCTACTGTA ATTAATTTGG GTCTATTATT 180  
 AACTCTCTGT TCCATCATAG AATGTGGCCA GGCCTTACAA TGGAGAGCCA GAGTTAAAC 240  
 TTCAAGTGC ATCTGTTTTT GGGCTGAGTC ACCACCGGAC CTCGAG 286

## (2) INFORMATION FOR SEQ ID NO:397:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC AAAGAGGCCT AAAAATGAAA ACCTCTGCAC TTTAATTTTT TTCAGTAATT 60  
 TCCAGCTATT TCTAGGTATA AAGAGCAGCT CGTTTCTCTT ATTTATTTTA GTCTCATGTG 120  
 TCAATACTTT CCGATGCTTT GCTTAATTCA TGTATGTGTG CAGTGCTGCA ATGCCCAGAC 180  
 AAACGTGAGC ACACCCACCA ATCTCGAG 208

## (2) INFORMATION FOR SEQ ID NO:398:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 452 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC AAAGAGGCCT ATGATGAAGC TGGGCATTTA TAACTAGATT CATTAAGGAA 60  
 TACAAAGAAA ATACTTAAAG GGATCAATAA TGGTGTCTTC TGGTTGCAGA ATGCGAAGTC 120  
 TGTGGTTTAT CATTTGTAATC AGCTTCTTAC CAAATACAGA AGGTTTCAGC AGAGCAGCTT 180  
 TACCATTTGG GCTGGTGAGG CGAGAATTAT CCTGTGAAGG TTATTCTATA GATCTGCGAT 240  
 GCCCGGGCAG TGATGTCATC ATGATTGAGA GCGCTAACTA TGGTCGGACG GATGACAAGA 300  
 TTTGTGATGC TGACCCATTT CAGATGGAGA ATACAGACTG CTACCTCCCC GATGCCTTCA 360  
 AAATTATGAC TCAAAGGTGC AACAAATCGAA CACAGTGTAT AGTAGTTACT GGGTCAGATG 420  
 TGTTTCCTGA TCCATGTCCT GGAACGCTCG AG 452

## (2) INFORMATION FOR SEQ ID NO:399:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC AAAGAGGCCT ATCTTCCTGA AGAGCAATGG AGCCGCTTTT ACTTGAAGA      60
GGACTAATCG TATATCTAAT GTTCCTCCTG TTAATAATTCT CAAAAGCAAT TGAAATACCA      120
TCTTCAGTTC AACAGGTTCC AACAAATCATA AAACAGTCAA AAGTCCAAGT TGCCTTTCCC      180
TTTGATGAGT ATTTTCAAAT TGAATGTGAA GCTAAAGGAA ATCCAGAACC AACATTTTCG      240
TGGACTAAGG ATGGCAACCC TTTTATTTC ACTGACCATC GGATAATTCC ATCGAACAAT      300
TCAGGAACAT TCAGGATTCA CAACTCGAG                                     330

```

## (2) INFORMATION FOR SEQ ID NO:400:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT AAGCAAACCC AGAGGTGGAT GTTATGAACA GCTGTGTCTG      60
CCAAACACAT TTACCTTTTG GCCCCACTTT GAAGGGCAAG AAATGGCGTC TGCTCTGGTG      120
GCTTAAGTGA GCAGAACAGG TAGTATTACA CCACCGGCCC CCTCCCCCA GACTCTTTTT      180
TTGAGTGACA GCTTCTGGG ATGTCACAGT CCAACCAGAA ACACCCCTCT GTCTAGGACT      240
GCAGTGTGGA GTTCACCTTG GAAGGGCGTT CTAGGTAGGA AGAGCCCGCA GGGCCATGCA      300
GACCTCATGC CCAGCTCTCT GACGCTTGTG ACAGTGCCTC TTCCAGTGAA CATTCCCAGC      360
CCAGCCCCAT CCTCGAG                                     377

```

## (2) INFORMATION FOR SEQ ID NO:401:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGGCAAGGTC TTCGGCTCGT GCCGTTCTAA GCCGGAGAAT      60
TCTCGCGGGA GCAGGGTTAC GTCCTCGTGG GATTCGTGG CGGTGGCTGA GGTCTCCAG      120
CAGCCTGACC TGAGTGGGTT AGTGATCCAG AGAAACCAGC AGGCCAACTT GTTCAGGAAG      180
GTTCCGGGAAG CTGTTGGAGC AGTGTGGGGA ATTTCCACC AGGATGAGTA TGATTGGCTG      240
TGATTTTGA TCGTAAAGCT GAAAATTGAA ATCATGAAAG TAGACAGGAC TAAACTGAAG      300
AAGAACTCGA G                                     311

```

## (2) INFORMATION FOR SEQ ID NO:402:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 357 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```
GCATTGATGG AAAAGCATAA TGTCTTAGAA AAAGGCTTTC TAAAGAAAA AGAGCAAGAG      60
GCCATTCTTT TTCAAGATAG ATACAAAGAA CTCAGGAAA AACATAAACA AGAATTGGAA      120
GACATGAGGA AAGCTGGTCA CGAAGCCCTC AGCATTATTG TGGATGAATA TAAGGCACTA      180
CTGCAGTCTT CAGTTAAGCA ACAAGTAGAA GCTATTGAAA AACAGTACAT TTCTGCAATT      240
GAGAAACAGG CACACAAGTG TGAGGAGTTG CTAAATGCTC AGCATCAGAG GCTCCTTGAA      300
GTGCTAGATA CAGAGAAGGA ACTGTTAAAA GAAAAATAA AGGAAGCCCA TCTCGAG      357
```

(2) INFORMATION FOR SEQ ID NO:403:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 492 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```
GTTCTAGACC TGCCTCGAGC GTTAATGGTA TAAATCACTT GTTTGTAAAG TATTGTTTTT      60
AAATATTGCC AGATTGATA TCTTAGTATT GTATTTTAT ATTTGTCTTC ATGTGTTTTT      120
GTTTTCTCAT AAGTGTCTGT ACCCCCCTTT TTTTTCCTT AAAGAGAAAT AATGAGAGAG      180
ATTGTCTGTC TTGAAGTTCT CAGTGCCTGT GCATTGCTGC CACTACACAG CTAGTATCAT      240
GACAGCAGCT TCAGAACCAG AGCTGGCTTC CAGGCAAGGC TGGGTGGGGA AGAAAGAGAA      300
AAACAAAAGA ATTATTTCTC TATGCCGAGA CCAGCTCGGT CAGGGAGACC CTAACCTAGC      360
GGTGCTAGAG GAATTAAAGA CATAGACACA GAAATATAGA GGTGTGAAGT GGGAAATCAG      420
GGGTCTCACA GCCTTCAGAG CTCAGCCACG AACAGAGATT TACCCACGTA TTTATTAACA      480
GCAAGACTCG AG                                     492
```

(2) INFORMATION FOR SEQ ID NO:404:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 395 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```
GAATTCGGCC TTCATGGCCT ACTTCCCTCT AAGGTCCCCA AATGCCTCTC ACGTGCCTAG      60
CATTTAGCTG CTGCACCGAG CATGCTCACT GACAACTTT TGGCCAAGAA GAGCCTTTTG      120
GTCTCTCTTG GTCAGATCTA GGAGGGCTTC AGGACTCTCC AAAACTCACC CACTCAGAGA      180
GCCTGCCAGG AACACTCAGC TGAGCGATGG CATTGTGGAG CCTGGGTTTT CAGAAGGGAG      240
CCCATAGTGA GTGGTAGCAT AACCTTGTTA AGTTTGATT TTCCTTAGAT ATAGAAACAA      300
ATCAAATGCT GCTAAATTGG TAAGGGATGG AGTTTTCATA TCACGTCACA TTTTGCTGAG      360
CCGTAACCGA ACAGGGAAAA AGCAGAGACC TCGAG                                     395
```

## (2) INFORMATION FOR SEQ ID NO:405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

```

GAATTCGGCC TTCATGGCCT ACCAAGTTCT AACTGTAAAA TGGGGACATT TTACCTTTCT   60
TTCTTTGGAT AGGATCAGTT CTTAAGAGCA GCCCCGGTAA CTGGAGGAAT GGGAGCCGTT   120
TTGATGAGAA AAATGGGCTG GAGAGAAGGA GAAGGATTAG GAAAAAACAA AGAAGGCAAT   180
AAGGAACCCA TCCTAGTTGA TTTTAAGACA GACCGAAAAG GTCTTGTTGC AGTAGGAGAA   240
AGAGCACAAA AGAGGCCTCG AG                                     262

```

## (2) INFORMATION FOR SEQ ID NO:406:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```

GAATTCGGCC TTCATGGCCT ACCCATTGTG CAATTTTTCG TTTGTTGCAA TTGCTTTTGG   60
TGCCTTTGTC ATGAAACCTT TGCCTACAGG TGCTGTTTAT TTACACCCCT GTCCCAACCT   120
CACCCCACTC CCTTTCTTTT GCTGCTGGGA AGTCAGTAAG AACTGTGGGT GGGGTTCTGA   180
GGTAATCAAT ACAAAGAAGA AGGTAAGAAA TTGGAGGGGA CTCAGGGGAG ATGGCAATGC   240
TGACAAGGGG TTGGATGGAA TTTGTTCTGT AAAGTGAAG CAGCTCGAG                 289

```

## (2) INFORMATION FOR SEQ ID NO:407:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```

GCTCCTTCTG TATCCTTCCT TTCCCATCTG TCTGCTTCTA ACAAATAAGA CAAGCTAAGA   60
AGCAGCTTGT TTCATGATTC TATACTCACT TCCAAGCTTT CTCTGCATAG ACTTTCCTAG   120
TTTGCCACTT TATCTTTTCT CCATCCCTCC AGCCAGTCAT GAGATTCTAC TCCCCATTCA   180
TACATGCATT TATTTATCCA GACTTTACTG AAGGCTTACT CTTTGAACCT TGCAAAATGC   240
CAGTGAGGCA AAGCATGCAT CCTGTACAGG AAAAATCAG TCTAGAGGGG AGAGATAAGC   300
AAACAAGTGA TTACCACACC AGGCTCGAG                                     329

```

## (2) INFORMATION FOR SEQ ID NO:408:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 222 base pairs

( PE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

ATTGAATTCT AGACCTGCCT CGAGAGCTTT TGAGATTGTC TATTTTGTCT GAGTGAGTTT	60
TGGTACTTTA TTGTTTTCGA TTGGTCCATT TCTTCTACGT TGTGAGATCT CTGAGTGTC	120
AGTTGTTTCT AGTACTCCGT TATTATCTTT TTCATGACTG TAGGATCTGT GGTGATATTG	180
ATGATTGTGT TCTTCACTCC TTTTGTGTTGG CCTACACTCG AG	222

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 505 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC TTCATGGCCT AAACCTGCGAG AAATGAAGAC TAGAGTACAC AGCACACTCA	60
GAGCCAGAC AGACTTCGTC CCAGGACATC ATCTGTTCTT GATGCCCATT CTTCTCTCCT	120
AAACATCATT TACTTTTCC TCTAAAAGTG CCTGCAGACC CCCACTACTC TCTCCCATGG	180
AGAAGGGCAT ATAAGCTTCG AATCTCACGG GGTATTGGG CACTCTGTCT CTTGTGATGC	240
TCCTATGCAT GTAATAAATT TATGTGTCCT TTCTCCTATT AATTGGTCTA ATGTCCATT	300
ATTCCATAGA TTCAATTATC AAACCTCTCAG AGGGCAGAGG GAAAATTTTC ACTCCCTTAT	360
ATCATCAGAA ATATAAATAA AAATAGCACA AACTCAGTA AATGATTATG TTATTATTGT	420
TATGTTTGTA ATATCTTGGT GTCTGGTTAT TTTAAATCAT ATCACTTAAA GAAACAGTGT	480
TCCTTAGGCC ATGAAGGCCG AATTG	505

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 650 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

GTATGAACAT TGAGGGCCCA GATCTCAATG TGGAAGGTCC GGAGGGAGGC TTGAAAGGTC	60
CCAAATTCAA GATGCCTGAC ATGAATATCA AAGCTCCCAA GATCTCCATG CCTGACATTG	120
ACTTAAACTT GAAAGGCCCC AAGGTGAAAG GTGATGTGGA TATTTCTCTT CCCAAACTTG	180
AAGGGGATCT GAAAGGGCCA GAGGTTGATA TCAAAGGCCC TAAAGTGGAC ATCAATGCCC	240
CAGATGTGGA TGTTTCATGGT CCAGACTGGC ATCTGAAGAT GCCCAAAGTG AAAATGCCCA	300
AGTTCAGCAT GCCTGGCTTC AAAGGAGAAG GCCCTGAAGT CGATGTTACC CTCCTAAAG	360
CTGACATTGA CATTTCTGGT CCCAATGTAG ACGTTGATGT TCCAGACGTG AATATTGAAG	420
GTCCAGATGC AAAGCTGAAG GGCCCCAAGT TCAAGATGCC TGAGATGAAC ATCAAAGCCC	480
CCAAGATCTC CATGCCTGAC TTGACCTGA ACTTGAAGGG ACCCAAATG AAGGGTGATG	540
TGGTTGTGTC TTGCCCCAAA GTGGAAGGTG ATCTAAAAGG CCCTGAGGTG GACATCAAGG	600
GCCCCAAGT GGACATTGAC ACTCCTGACA TTAACATCAA GAGGCTCGAG	650

## (2) INFORMATION FOR SEQ ID NO:411:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```

GAATTCGGCC TTCATGGCCT AGGGGCTGGA GGGTGGCCCG AAGCAGATGG GGCCGGCCTT      60
GCAGGCACTT CTAAGGCCTT GGGGTTTGCT TCCGAGGGAG TAGGGAAGGA GAGCGATGTC      120
ACCCTGTGAG GCTTGGTCAC ATACCCCAAT GGATTGGTA GCACACGCCA CAGTGAAGGT      180
ATAAGCTACT GTCATCACAC GTAATTATTT CATGAAACAG AAAATTTTAA AATAAAAGAA      240
AATAGAAGTT TCCCTATTTT CTTCTCCTGC ACTATTGGAT CATCTGTTT AGCCCTCTTT      300
TAAGACAAAT GGACTTAGCA AACGAGTGTA AATAGGAATG AATGGTTTGT TGGGGTTTAT      360
TTTATTTTAT TTTATTTTAT TTTATTTTAT TTTATTTATT TTATTGAGAC AGAGTTTCAC      420
TCTTGTGACC CAGGCTGGGC TCGAG                                         445

```

## (2) INFORMATION FOR SEQ ID NO:412:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GCCTGCCTCC AGGCCTTTGC TCCCACTGTT GNCTCCACTT AGAATAACAT TCCACCCCAT      60
CTCTATAAAT ATCCTACAGA CAAATACTAC CTTCCCCTTA AGGCCAGTTC TAACCCTAAC      120
TGACAACAAA TCATCTCTAC ATGATCTTTT CTTCTGGGA ATGCCTGCAG CACTGTTTAA      180
TCCTGCCCCA CCACCATCCC CTCACCCAGC ACCCTCTCCC AGACCAGACA GGGTGGCTCA      240
TGCCTGCAAT CCCAGCACCT TGGGAGGCTG AGGCAGGAGG ATTGCTCGAG      290

```

## (2) INFORMATION FOR SEQ ID NO:413:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTTGACA TCTTAGAACA TTCTGCAACC TTTTGCCTGG GAAATGGAAG CAGATCTAAT      60
CTTTACCACC CTCATGGCTC AAGGACCTCA TCTGGCAGCC TGGCTCATGT TTTTCAGCCA      120
AGTAGCTTCC AGCTTACAGC AGCCCTCAAA TTTGGACCTG CCACCAGCTC CAGAGCTTGA      180
CTGGATGGAG ACAGGACCAT CTCTGACATT CATTGGCCAT CAGGATATAC CAGGAGTTGG      240
TAACATCCAC TCAGGTGCCA CACCTCCCTG GATGATCCAA GATGAAGAAT ACATTGCTGG      300
GAACCAAGAA ATAGGACCAT CCTATGAAGA ATTTCTTAAA GAAAAGGAAA AACAGAAGTT      360
GAAAAAATC CCCCCAGACC GAGTTGGGGC CAACTTTGAT CACAGCTCCA AGGACCTCGA      420
G                                         421

```



## (2) INFORMATION FOR SEQ ID NO:414:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

```

GAATTCGGCC TTCATGGCCT AAGCCAGTCA ACCAGCAGTA TTAGTGCTGT TTTCAAAGAT      60
TTAAGCTCTA TAA AATTGGG AAATTATCTA AGATCATTTT CCCTAAGCAT TGACACATAG      120
CTTCATCTGA GGTGAGATAT GGCAGCTGTT TGTATCTGCA CTGTGTCTGT CTACAAAAAG      180
TGAAAAATAC AGTGTTTACT TGAAATTTTA ACTTTGTAAC TGCAAGAATT CCAGTTCAGC      240
CGAGCCACTT CGAG                                         254

```

## (2) INFORMATION FOR SEQ ID NO:415:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

```

GCAACAGAC AAGGCTTACA GGTTAGTTCA GGATCTGCGC CTTATCAAGC AAATTGTTTT      60
GCCTATCCAA CTTGCGGTGC CAAACCCATA TACTCTCCTA TCCTCAATAC CTCCTCCAC      120
AACCCTCCA TAACCCATTA TTCGGTTCTG GATCTCAAAC ATGCTTTCTT TGCTATTCTT      180
TTGCATCCTT CATCCAGCC TCTCTTTGCT TTCACCTGGG CTGGCCCTGA CACCCATCAG      240
CCTCAGCAAC TTACCTGGGC TGTACTGCCA CAAGCCTTCA CGGACAGCCC CCATTACTTC      300
AGTAGCCCTC GAG                                         313

```

## (2) INFORMATION FOR SEQ ID NO:416:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

```

GCCTGCCCCC ACCTTACAGG TCTGGGATGT ACCTTTCCAT CTGTTGCTGC TTTCTTCTAT      60
GGGCCCTGCG CCTCACTCTC AAGAACCTCA ACTACTCCGT GCCGGAGGAG CAAGGGGCGG      120
GCACGGTGAT CGGGAACATC GGCAGGGATG CTCGACTGCA GCCTGGGCTT CCGCCTGCAG      180
AGCGCGGCGG CGGAGGGCGC AGCAAGTCGG GTAGCTACCG GGTGCTGGAG AACTCCGCAC      240
CGCACCTGCT GGACGTGGAC GCAGACAGCG GGCTCCTCTA CACCAAGCAG CGCATCGACC      300
GCGAGTCCCT GTGCCGCCAC AATGCCAAGT GCCAGCTGTC CCTCGAG                                         347

```

## (2) INFORMATION FOR SEQ ID NO:417:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```
GAATTCGGCC TTCATGGCCT AGCAGATGAT TGACATTGCT ATCGATGGTT TCCTTTTGAC      60
TCCAGTGCAG AAGATCTGCA AGTATCCCTT ACAGTTGGCT GAGCTCCTAA AGTATACTGC      120
CCAAGACCAC AGTGACTACA GGTATGTGGC AGCTGCTTTG GCTGTCATGA GAAATGTGAC      180
TCAGCAGATC AACGAACGCA AGCGACGTTT AGAGAATATT GACAAGATTG CTCAGTGGCA      240
GGCTTCTGTC CTAGACTGGG AGGGCGAGGA CATCCTAGAC AGGAGCTCGG AGCTGATCTA      300
CACTGGGGAG ATGGCCTGGA TCTACCAGCC CTACGGCCGC AACCAGCAGC GGGTCTTCTT      360
CCTGTTTGAC CACCAGATGG TCCTCTGCAA GAAGGACCTA ATCCGGAGAG ACATCCTGTA      420
CTACAAAGGC CGCATTGACA TGGATGCTCG AG                                     452
```

(2) INFORMATION FOR SEQ ID NO:418:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 259 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```
GATAACTTGA GATCAAATCA GTCATATTTG ACTCTTCTCT TTTTCACTCC TTTTATATCT      60
GATCAGTCAG CAGTTTTTTT AAACCCTGTT CGAAGCAGTT CTCAACACTT GTGCACCCAT      120
TCTTTCTCCT ACACCACTCA ATCTAGACCC TCACATGTGG CTGTCCTGCT TTCCTTCTCT      180
CCTACTTCTA AGCTATTCTG TGGAGAGATG TCAAAGTAAT CTTCACAAAA AATCTGATTG      240
CATCACTTCA CATCTCGAG                                     259
```

(2) INFORMATION FOR SEQ ID NO:419:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 331 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

```
GAATTCGGCC AAAGAGGCCT AATTAGAAAT GGCTACTCCC CAGTCAATTT TCATCTTTGC      60
AATCTGCATT TTAATGATAA CAGAATTAAT TCTGGCCTCA AAAAGCTACT ATGATATCTT      120
AGGTGTGCCA AAATCGGCAT CAGAGCGCCA AATCAAGAAG GCCTTTCACA AGTTGGCCAT      180
GAAGTACCAC CCTGACAAAA ATAAGAGCCC AGATGCTGAA GCAAAATTCA GAGAGATTGC      240
AGAAGCATAT GAAACACTCT CAGATGCTAA TAGACGAAAA GAGTATGATA CACTTGGACA      300
CAGTGCTTTT ACTAGTGGTA ACGGGCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:420:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 269 base pairs

(C) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

```
GAATTCGGCC AAAGAGGCCT AAGAGCATTT ACCTGTCTGA CAATTGTATT TTTAATGATA      60
GTTTGCTTTT ACTTGGTCTT TATATATTCA ATTACAAATT ACTGATATTT TGTTTAAATC      120
TACCACATTT TTCCATTGTA CTGTTTATTT TTATGTCCTT TCTTCTTTT AGATTAAGTC      180
TTTTTCTTC TCACCCCTC ACCCTCCCTC CCTGGTTATA CATTCTTTTA CTATTCTTTT      240
TGTTATTCCA TAGTTGCAGC AACTCGAG                                269
```

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 405 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

```
GAATTCGGCC AAAGAGGCCT ACATTGAGGT AAGAGATATT TAAAAGGTTT TTAGGTGAAA      60
MTTGAAGCAG GGATGAGATT GGGATTCCAC CTTTGTTC ATGCATACCT GTTGATAATC      120
AGCTGTTCTT GTATCGACTC CGTGTCAACT CCAGAGCAGG GGGTATCCTC CTGTAGTGCA      180
CCTTCTCTCT TGGCCTGGAG GCAGCACTTT CTGTGCCTGG GCAGCAGAAA TGGGGAATGT      240
TCTTTGTTCC GTTGGAAGAAA CGGGCCCAA CATCTAGCCC TGTTGCATAA GGCATGGAAT      300
TGCCCAAGTG GGGAGGACCT GTGCTGGAAG GGGATCATCA AACTCCATCT GCCCATCAG      360
ATGCCTGAAC TCTTGATACA ACTCTGCCA TCCAAGCTAC TCGAG                                405
```

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 327 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

```
GAATTCGGCC AAAGAGGCCT ACTCGTACTT ATTTATAAAA AAAGTTAACT GTAAAACAGC      60
CTCAGGCAGG TCCTTCAGGA GGTACTCCAG AAGAAAGTAC TGTTATCATA GATGACAACT      120
CCATATGTGT TATTGCACCT GAAGACCTTT CACCTGGACA AGATGCCGAG GTGGAAGACA      180
GTGATACAGA TGATCCTGAG TATCTTAGTT TTTTGTTTT TGTTGAGACG AAATCTCACT      240
CTTGCCCCCA GGCTGGAGTG CAATGGCAG ACCTCGGCTC ACTGCAACCT CTGCCTCCCG      300
GGTTCAAGCG ACTCTCCAAG CCTCGAG                                327
```

(2) INFORMATION FOR SEQ ID NO:423:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 315 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(i) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

```
GAATTCGGCC AAAGAGGCCT AGAATAATAC ACTAGTAAAA AAAAATGTAT GTCAGGCACT    60
GGGAAGGGCA GTAGGAATAT AGAAATGAGA AGCCGTGGAT TAGAGACTCA CAGTCTACTG    120
GGTAAAAGAA TACGAAAGCC AATGTATTAT ACTGTGGTAG CTGCTTTAGT AGATGTATGG    180
ATAGAAAAGT AACAGAGAA GAGAATGACT ATCTCTGCCT AACAGAAAGA TATTTTAAAA    240
GAAGGGTTTT GGGGCTGGAT TTTGAAGGCT CAATAGGCTC CTACCATATA GAGAACTAGG    300
AAGCGAGTCC TCGAG                                     315
```

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```
GAATTCGGCC AAAGAGGCCT ACTATCCAGG TTTACATTTT AAGGCAGTCG AGACCTTATT    60
CACGTGGTAT ATAAACAACC ACATTCTCTT TTTATATGGA ACAACACTTT TCATTGCGG    120
CTGGCCTTCT CACTAGCTTA TGCTTTTTTT TTTAAGACC TTTCTTAGCA CTCGCTGAAC    180
TCCTCCCCCT CACAATCAAT CTCAGCAACT CAGCAGAGTC GCTTCAGTTC ACAGCTCTTA    240
ATCCTTCACT CCAGACTAAA GCTAATCTTA TGCTCTCAA CAGCTACAAC TCACTGTTAT    300
CACAGTCCG ACAGCAGAGA CTCGAG                                     326
```

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```
GAATTCGCCA AAGAGCCTAT AGAAATAATA CCACGACCTG CGCATTCAAA GCTGTTGTAT    60
CTGGATTGTG ACTGCGTGGA AGGTCGAGGC GGGAGACAG GGGCTGTGTC TTTTCGTTAT    120
AAACTCTGCA TTAATTGATT TTTGCACTAC GTACATTTAC TTTGATAACA CTGGAAGAA    180
TAAATTGGCC ATGTAGTGTA GCTTCCAAAA AAACTATTG CTGGGGTTTC AAGGTCAAGG    240
AAATTTTCATT CTCATCAGTT TCTTGGGAAA GAGGAAGTGG AATGATGTTG TCAGAAAGTG    300
AAACCATGGG TCATTTTCAG AACTACTCAG AGTAATAAAT ATTTTTTGTC AGTTTTGTTC    360
TTACAAGTGA AATGGTCCCC TCGAG                                     385
```

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```
GAATTCGGCC AAAGAGGCCT AAGAGATTTT TATTATGATT TTGATTTCTT TACTACAACA      60
TTGCATGTGT CTGGAGTATA GCCATTACAC TTTATGAAAA AGGCAAAATG GTCATTTGGG      120
GTGTTTTTAGG AAGTTTGCCA AAAGGCTCCT TTGTCATTAT AATCCTTCCT AAGCTGCCAT      180
CCACGGGTTT AGGTCATGGA TATGAAAAAGT GAAAGGGTTT AGAGATGAAG TAGTGTCCCC      240
TGAGTGCTTA CCAACCTGTT AATCTTTTGT AGATGTTAAT TTTTTCATAT AGAGCCCCCT      300
AAAAATCTTGA TGGCTCTAGA TCAGTCAAGC CTAAGAGAAG ACGTATTAT GGAaaaaaac      360
AAAAAACAAA AAAACCTTGC TGGATTGCTA GTAATATCTA CTTCTTGGA ATTAATACTT      420
CATATTTTTT AAAAAAATTA TTGATGCATT AGGACTCGAG                                460
```

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```
GAATTCGGCC AAAGNGGCCT AGGAAAAACA TGAAATACAT AAATGGATTA ATTTTGCAAA      60
TTAATCTNGC AAATTAACTCT ATAGCTCTTA ATGTTTCTTC CAAATTAAAG GAAAAATGGA      120
TAAGGAAGTA CTTTCTTGGC AAAGTGTAGA TGAATACTGA ATAAAGTCA TTCTTTCCTA      180
AAGAAGAAAA GTGCATTTTA GTTTTTTGA AAAAAATGTAA TTTTAGAAAG TCTCTTCTAT      240
GCAGATTTTA GAAAGTCTTT TCTATTTTGA GAAAGTCTTC TTGTATGCAG ATTTTGTTCA      300
ACTTCCCCAT CTGTACTTAC CAAAGGAAAA ATAAACAGTT TATAGAATAT TAATAGAATA      360
ATTATGTGCN ATGTAAAATA TGTTGAATCT CCCTAATTTA TATTTACTAT GTGAATATAA      420
ACTACAGAAAT AAAGAAACTG TTCCTCCTTT TATCCATTAT TTTGTTGAAA ACAACTAAAG      480
AAATCTTACA GATTAATGTT CATATTAAAA GGACTCCTCG AG                                522
```

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```
GAATTCGGCC AAAGAGGCCT AGGTAGTTAT CAAGAGATTT TAAAACTTCA ACCCTTTTTC      60
TCTTATAGTT AGTGAAGAGA GTAGAATATC TCCAGTTTGT GCTGACATCT CTACAACCTG      120
AACAAATTGGC TTAAACTTCA CTTGGGATTC CCGGTTGCTT GTTTAGCAT GGCNAAATTT      180
GGCGTTCACA GAATCCTTCT TCTGGCTATT TCTCTGACAA AGTGTCTGGA GAGTACAAAA      240
CTGCTGGCAG ACCTTAAAAA ATGTGGTGAC TTGGAATGTG AAGCTTTAAT AAACAGAGTC      300
TCAGCCATGA GAGATTATAG AGGACCTGAC TGCCGATACC TGAACCTCAC TAAGGGAGAA      360
GAGATATCTG TTTATGTTAA ACTTGCAGGA GAAAGGGAAG ATTGTGGGC AGGAAGTAAA      420
GGAAAGGAGT TTGGATATTT TCCCAGAGAT GCAGTCCAGA TTGAAGAGGT GTTCATATCT      480
GAGGAAATTC AGATGTCAAC GAAAGAATCT GACTTCTTTT GTCTTCTTGG AGTAAGTTAC      540
ACATTTGACA ATGAAGATAG TGAATTAAAC GGTGAACTCG AG                                582
```

(2) INFORMATION FOR SEQ ID NO:429:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

GAATTCGGCC AAAGAGGCCT ACTGATCAAG TGACCCATTA CTGCGGGAAA AAACCACACA	60
TACAAAAGCC TTTGACCCCA GTAATTTTGT ATTGGTATAT TTACCCTGAT CTTAAACTGC	120
AAGGAATGTC CGCAATTAGA GTTTTCTTT GTTTCTAAG TCTGAACTT GATAATCCAT	180
TTCTGCCTTC CCATGACGAG TGGACATTCC TCCAGCCAGT GGTGAGTTCC TCTTTCCTTC	240
GCTCTCAGCA AGAGCATGGG TTGCCCTCCC ATCTCGTAAG CAGAGCCTAC CACAAACGCA	300
GCTCAAATCT CGAG	314

## (2) INFORMATION FOR SEQ ID NO:430:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC AAAGAGGCCT ATTGGGTCCT ATTTACAACT TTAAGAATGG AGGCATACTT	60
CAGGAAAGAA AGCACCAGTG CAGTTCCAAT TTATTATTGT ATCTGCTGTC TTGAGAGTAC	120
AGGGTGTATG AGAGTGCACA GTGGTTTAGA ATCACTATGG AATTTAAAAA GACCCAGAGA	180
CATTAAACAAG AATCCACATT CTAAGTCGTC AGAATCCACA TTTCTGACCT TGTCTGCTGG	240
GGCCTGCTCT GTTTTGTATG GCTCAAATA TAATCTTTT ATTGAAATAC ATGTTCTCTCA	300
TCCTGTTTCA GGGCTTCTGC CTGGAATGTT CCTCCCCCTA GCATTGTAG GGCTGGCTCC	360
TTCTGTCTAT GCAGGTCTCA GCTCAGATGA CCCCATCTCA GAGAGGGCTT CCCTGACCAA	420
CCAATCTACA GCCCTTCCTA GTCACCTTTT TCCACATCAC CCTCTTTATG CATGGAGGCA	480
GATAGGTGTT TTACCCTGTT TATTATTAT TATTATTTT TTGAGACAAA GTCTTGCTCT	540
GGCACCAGG CTCGAG	556

## (2) INFORMATION FOR SEQ ID NO:431:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GAATTCGGCC AAAGAGGCCT AGAAGTAACG GAAGCTACCT TGTATAAAGA CCTCAACACT	60
GCTGACCATG ATCAGCGCAG CCTGGAGCAT CTTCTCATC GGGACTAAAA TTGGGCTGTT	120
CCTTCAAGTA GCACCTCTAT CAGTTATGGC TAAATCCTGT CCATCTGTGT GTCGCTGCGA	180
TGCGGGTTTC ATTTACTGTA ATGATCGCTT TCTGACATCC ATTCCAACAG GAATACCAGA	240
GGATGCTACA ACTCTCTACC TTCAGAACAA CCAAATAAAT AATGCTGGGA TTCCTTCAGA	300
TTTGAAAAAC TTGCTGAAAG TAGAAAGAAT ATACCTATAC CACAACAGTT TAGATGAATT	360
TCCTACCAAC CTCCCAAAGT ATGTAAAAGA GTTACATTTG CAAGAAAATA ACATAAGGCT	420

CGAG

424

## (2) INFORMATION FOR SEQ ID NO:432:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 418 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```

GAATTCGGCC TAAGNGGCCT ACATAAAAGT AAGAAAATAT CTTACTAAAA TCTCTTTTCT      60
TATAACATTT AGNTTACGTA TATATTTTAT CTCCCTTTTT TTGNAATATA TATAAATCAA      120
ATAACAGCTG AATAAACCTT TGGTCTTTTT TTTTTTTTTT TGTCTCAGGA TTGTCTTTAT      180
CTGGGACCCG AGATTAATTG CTTCTTTTTT GCTTTGGCAA AAGATTGTTT TTACAATTTT      240
TAGTCTTTTA AAGTTGACAC AGATTTGTTT AGTCTTGCTC ATTCTAAAAG CACACAAAAG      300
TTGAGCATAA AAATAGGATT AAATTTAGCA ATAAAGAATT ATAAAGACTA AAAGATACTG      360
AGTAAGTTGT TTGACAGAAA CCTGATTATC CATGATGATT ATTTGCAGGC TTCTCGAG      418

```

## (2) INFORMATION FOR SEQ ID NO:433:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 157 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

```

GAATTCGGCC AAAGAGGCCT AGAACTCCAG AGGCAAGTGT TATATGAATT ATGCATTTGA      60
TTCTACATGT TTATTAGACA TGTATGGCAG ATACATTTAT ATTTTACTAA TGGTTATGAT      120
GACTTTAATA ACTTTCAAAG GATTATGGGG ACTCGAG      157

```

## (2) INFORMATION FOR SEQ ID NO:434:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 440 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

```

GAATTCGGCC AAAGAGGCCT ATGTTTTTAC TACTATTATT TTTTTTTACC CAAGGGAGAA      60
AGACAAAAAA ACGGTGGGAT TTATTTAACA TGATCTTGGC AAACGTCTTC TGCCTCTTCT      120
TCTTTCTAGA CGAGACCTTC CGCTCTTGGG CCAGCCCTTC CTCCCTGCAG GGCCCCGAGC      180
TCCACGGCTG GCGCCCCCCA GTGGACTGTG TCCGGGCCAA TGAGCTGTGT GCCGCCGAAT      240
CCAACTGCAG CTCTCGCTAC CGCACTCTGC GGCAGTGCCT GGCAGGCCGC GACCCGAACA      300
CCATGCTGGC CAACAAGGAG TGCCAGGCGG CCTTGGAGGT CTGTCAGGAG AGCCCCGTGT      360
ACGACTGCCG CTGCAAGCGG GGCATGAAGA AGGAGCTGCA GTGTCTGCAG ATCTACTGGA      420
GCATCCACCT GGGTCTCGAG      440

```

## (2) INFORMATION FOR SEQ ID NO:435:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

```

GAATTCGGCC AAAGAGGCAT AACATAGAG AAATTGGTGA TGTAAACCT TCTGAATTTT    60
GTTTAAAGTG CACTGGGAAG TGATGGAAGG GTTTGTAGCA TAGCAGTAAT CTGATCTGAT    120
CTGATCCGGT GTGAATGTCT TTTAGCAGA TGATTTTATT TTACCAGCTC TCTNGAAAAGT    180
TTAATCAATG TGATAGCCAT GACAGTTTAT TAAACTACTT ATTTGAGAAA GTAACGCTCT    240
GTGGGAATCC AGATTATTTG TTTACTTCAT TTTAGATGTT AGTGCTAGCA CCCTTGTTTA    300
ATATTGTTT TAACACTTAT ATACTTAAAA GCAGGAAATC TCGAG                      345

```

## (2) INFORMATION FOR SEQ ID NO:436:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

```

GAATTCGGCC AAAGAGGCCT AAGAACTCAC AATAAAGTAT CATATTCCTC TCTTTTGACC    60
TAGAATTCAT AGCCCTAGTA ATCTCGTTT GATTAGATGC TTTGATTGGC AGTTATACAT    120
CTTTGATAAC ATTTTCAATG TGAATGAAT TATTCTTTCC TTAAGCCAT TTTAAGCAGA    180
ATGTCATATA ATGAGGGCCC ACGAGAAGGA ATAACAAAGC AGGGGTGTTG GGGATGGTGG    240
CTGGGGAGCT TTGGTGTAAT TATTAACCTG TGGTTGAGTT TTGCGATGTG TGCAAGTACA    300
CACAGCCCCG AACAACTCGA G                                     321

```

## (2) INFORMATION FOR SEQ ID NO:437:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

```

GAATTCGGCC AAAGAGGCCT AGTTTAAAA CGTATTGTTT AATTTTCNAA CATTAGGGA    60
TTTCCAGAT ATCTTNGTTG TNGGTTTCTA ATTTGATTCC ATTATGGTTA GAGACCATAC    120
TTGGTATGAT GAATTAATAA AAAAAATNTA GAGGTTTGTA TATGGCCTGA AACATTTTTT    180
AGGTGAGTGT TCAGTTTGTA ATAGGAAAGA TGTGCTCTGC TGCCGTAGG TAAAGTGTTT    240
CATAAGTAAT AATTAGGTCA AGTTGGTTGA TCGTGNTAAG GTCTGCTCTA TCCTTGCTGA    300
TTTCTGTCT GCTTGTCTA GTGATTACTG AGAAAGGAGT GTTGAAGTCN ACAACGATTG    360
TTATGGGTTT GTTCTCTTC TCCNTGAAAT TCTGTCTGNN TATGCGTCCT GTATTTTGAG    420
GACCCCTCGA G                                     431

```



## (2) INFORMATION FOR SEQ ID NO:438:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 392 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

```
GAATTCGGGC TTCATGGCAT ANGACAGGT TCCGGGNCCA GNNCANGCNC GGGACAAGNT    60
CAGAGATGAN GTTGCCCAN A GTNATGNNGA ACTCCAGTNC CCGNTGTCCC CGGNTTTTCT    120
CTCTTGTTGGN ACATGGGGAN NTNTGGANTC CAGCTCCCAG NACTGGAGTG CTATTCAANT    180
GATCNAGGAN GGAAGTGACA NAAATGTTTT TTTTTTTNTT TTTTAAAAA GNAGNNNCNN    240
GGGGATCNGA AGNAGATGAA TGCCCTCAAA GGCCATGNAT GTACTTCAAA NGAAGTGGNT    300
NNTGAAAACA GNTNNAANAA GTTAAANCGA NAGTNAAAAT NNATGTTGNG GANGAAGGAA    360
NTTGGTGGNN AGTNAAAAAA GAAGTAANCC GA                                392
```

## (2) INFORMATION FOR SEQ ID NO:439:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```
GAATTCGGCC TTCATGGCCT AGGTGTGCTT CCCTTTCCCC ATTTCCCAT ATTCCAGCT    60
GTATAGTAGT GTAGTGAAAA TCACTTGAGA TGTGGAAGAG TAGTCTGGTC TAGGAAGAGA    120
GAGGAAAAG TAAGTTTCCC AGGATAAGAG GGGGAAAAA GGCCCCAAAG CCTTCTCAAT    180
GAGGAATGGG GAAGGAGGTT TTGCTGCCAG GTTTTACTAA GTGCATTGA ATGAACCCCTG    240
CTATTGTAGT CCTCTTTTAT TAATGCTTTC CTGACATTTA CCCTGTTAGT TGAGGCTACT    300
CGAG                                304
```

## (2) INFORMATION FOR SEQ ID NO:440:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 579 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```
GAATTCGGCC TTCATGGCCT AATCACNGNA GTGACTGACA TTATATATTA NGGATCAAAT    60
TATGTCCACA AGCAATATTA TATAATCTAC GTAGAAGTGT AATAACAAAC AAGAGTACAC    120
TTAAATTTAC TTTAAAAGAT GTCTTTAGTT CATTCCAATA TAATTCTTGA TTAAATTTAG    180
GATTATTTCT ACATTTTAGG ANNTACAAAG GATCACGGGT AACATGGATT GGGNCCANAT    240
ATTTTTTTAA AGTTTCGAAT TGGTATCTGT AGTAGTGGAA TGTATAGAT TTGAAGTAAC    300
TCTCCACGGA CAGTGCTGCT TTCGTGTAGA GCAATTTAAT TGGAGAAGTG GCCATTCCTTA    360
CTTCAGGGAT GCAAAGATGG TCTCATACCA TTTGGATAAA TGTCGTGGTA TCCATGCTTT    420
TTTTCAACTA ATAACATCAT CTCTCTTCAT GACCAGTTAA TTGGGCTATT TGGCAGCCCA    480
```

STGAACCTACTAATGG CAAGTTAGGG GCAAATGGAA A CACAT CCGATAAAGT 540  
 TGAATGTAT GTTTAATCT TTCACAGAAG TCCCTCGAG 579

## (2) INFORMATION FOR SEQ ID NO:441:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 556 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCGGCC TTTATGGCCT ACCTACGGTA CCTGAAAACA ACGATGGCAT GGAAAACACC 60  
 TCCCATTTAC CTGTTGTTGC TGCTGTCTGT TTTCGTGATT CACCAAGTTT CNTCTCAAGA 120  
 TTTATCNNCC TGTGCAGGGA GATGTGGGGA AGGGTATTCT ANAGATGCCA CCTGCAACTG 180  
 TGATTATAAC TGTCAACACT ACATGGAGTG CTGCCCTGAT TTCAAGAGAG TCTGCACTGC 240  
 GGAGCTTTCC TGTAAGGCC GCTGCTTTGA GTCCTTCGAG AGAGGGAGGG AGTGTGACTG 300  
 CGACGCCCAA TGTAAGAAGT ATGACAAGTG CTGTCCCGAT TATGAGAGTT TCTGTGCAGA 360  
 AGTAAAAGAT AACAGAAGA ACAGAACTAA AAAGATACCT ACCCCCAAAC CACCAGTTGT 420  
 AGATGAAGCT GGAAGTGGAT TGGACAATGG TGACTTCAAG GTCACAACCTC CTGACACGTC 480  
 TACCACCCAA CACAATAAAG TCAGCACATC TCCCAAGATC ACNACAGCAA AACCAATAAA 540  
 TCCCAGGACC CTCGAG 556

## (2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 528 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

GAATTCGGCC TTCATGGCCT ATTATTTTGG CACCAGCGTC AAGACAAATA ATATCCTCTC 60  
 CCATTATTTT CATAAGTAAC ACAGATTCCC TGATTTTAA AACTAAAAA TACAGCTAAA 120  
 CCTTCTTAT GTATAAAGTA TGCCTATCAT ATACAGGGAG AGGTGGGTAA TAACTTCCT 180  
 GTAATGACAG TGTTTGCCAT TTCTTTATGG ATGGAATTGG AACATGAACA AGACCATGTC 240  
 CAGCGTTTTT ACTGTGAATG TAAATGGAAC AGCAGCCCAA AGCTGTTGTC TGTGCCCCAG 300  
 AGGTGCTACC TGTAGACAGG GACCAACTCC ATGTGTGTGT GTTAAGTGTG TGACTCCAAT 360  
 TAAGACTCCC AAGCAAATCC TGCAATATCC AAATGTAAAG AGTACTCAGT GGGAAAAAAG 420  
 TTGTTACCTC AAAGTCATTG CTTCTTTCCT GGCTGGGTCA CAGGGTGAAG AGATGAAGGT 480  
 TGCTGATGTA TATAGACAAT TAGGGAAAAA TGAGCGGCTT TCCTCGAG 528

## (2) INFORMATION FOR SEQ ID NO:443:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```

GAATTCGGCC TGGCCT ACTGGAATCT GCAGCCCCCA CATGCG TCTAACGCAT      60
GCCTCGTGTT CGTTTTGCAA ACATGCCTGT GGTGGAGGGT GGTCAGTTGT AGCCCTGTGC    120
GTCTCAAGGC TGCCTTGTGA GGCCATTCCC AGTGCCTGCC CTTGAGCTCC TTACCACCCC    180
TTTTCTGCT CGGCCCTTTA ATCCCTGACA GACCTGGACT GTGTGGCTGA AGGGGGACCT    240
GCAGCACTGC AGAAATGCCT CTGCGTGGTG CCATGAAGGA AAGAAACCTT GGCCTGGTCT    300
CGAG                                                                    304

```

## (2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```

GAATTCGGCC TTCATGGCCT AGGGCAGGGG GAGGGGTGCA NAGTGGGACC CTCACCACAG      60
GGTACTGAGA CAGGTCATTG TAGGTCGCC CCGCAATGGT GTTGAGTTGC ATCAAGTACT    120
CGAAGTTGGA TATCTCACGC TGTACCCATT TCTGGGTAAG GCCTGAGGCA CGCACCATCT    180
CCTGGGGGGA GCGGCTGCTT AGGTAGCCAA GAGAGGGGGG CCGTAGGCGC AGGANCCACG    240
AGTACACCTG GCCCCATCCC ACCCCATCCC TCGAG                                275

```

## (2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 418 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AACCAGCTTT AATTCAATT GAGGAATAAT AACAACCCTA      60
GAGATTCATA GGAAAGAGCA TTGAAATACA TTTTTCAT AAAGATACCT AAAACCATCT    120
ACCCAGCTTA GGGTTGAACT GAATTTCTGT GAAATAAATT TGTTTTAAAT ACTAATTATT    180
TTAAACTAC TTAATTCCTA AAAACAATGT CATCAGTTTC AAAAGTTTCA CTTTGGGAGG    240
ATATTCCTTA AAAGGCATAC ATAGATGGTA AAGTATAAAA TATTTCTGAC AGAATTATTC    300
AGTATTATTC AACATTTACT TTCATGTTTG TTATTGTACC ACAAAGATAG TGTCATTGTT    360
GGGTAAAAAT GTTGGCTGTT TTTGTTAATA TACTTAAAC TGTAACCACT GGCTCGAG      418

```

## (2) INFORMATION FOR SEQ ID NO:446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GAATTCGGCC TTCATGGCCT ACTACATCAA GCACCAGAAC CGCCAGCTGC GCGCCCTGTT      60
GCTCAGCCAC CAGTTCAAGC GCCGGGAGGC GCACCAGACC CACGCACAGA ACTTCTCCTC    120

```

```

CGCCGTG TCCCCGGTCC AGGTCATCCT GCTCCGTGCC      CTTCC TGGCNTGCGC      180
CTTCCTACTG ACCACCGCGC TGTATGGGGC CAGCGGACAC TTCGCCCCAG GCACCACTGT      240
GCCCTTGGCC CTGCCACCTG GTGGCAATGG CTCAGCCACA CCTGACAATG GCACCAGGCT      300
CGAG                                          304

```

## (2) INFORMATION FOR SEQ ID NO:447:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATAAC ATCAGTTCCC TTTGCCGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GGAACCTCGAG                                          380

```

## (2) INFORMATION FOR SEQ ID NO:448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC AAAGAGGCCT AAACAAATGA GGGTAGTAAT TTTTATCTG CTAAAACTTA      60
TATTTATATC ACATACTTGT TGCAATGATT TCAGTGTCTA CATAAATGGT GGCTTAGCTG      120
AGGCAGGTCT AGAATTCAAT CGAG                                          144

```

## (2) INFORMATION FOR SEQ ID NO:449:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

```

GAATTCGGCC AAAGAGGCCT ACTAGACGTT TGTACAACT ATTCCCTTGA GTTATTTTCT      60
CTGGCTCTTC AGTCCTTCC TCCCACCCCC TCCCCTGCAC CACCAATCCA TTCTTTTGCT      120
TAATTTCTCT CCATCCTTCA GGTTTCAGCT TTAAGAGGTC ACTTCTTTTA GGAGACATTC      180
CCTGAATCCT CTCACCTCCA CCCACAAAAA AGGCCTCTCC AGATGCCCTT CTTTCTGCT      240
CAAACCTCAT CTGCTTCCTT TATCATATGC TTATCGTTTT GGATTGTAAT TATTTATTTA      300
ATTGCATGTC TTTCTGCTAG TTTTGTGTT AGCAACAACA AGGATCTCGA G          351

```

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

(2) INFORMATION FOR SEO ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

245

AAAGGAGG AAAATAAAGC CCCGGCGCCT CGAG

394

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GAATTCGGCC AAAGAGGCCT AGGAAAAACA GAGTAAAAA TTGAAAAGA AGAAGGAAAC	60
AATAACAGAG TCAGCTGGTC GACAACAGAA AAAGAAAATA GAGAGACAAG AAGAGAAACT	120
GAAGAATAAC AACAGAGAT TATCAATGGT TCGAATGAAA TCCATGTTG CTATTGGCTT	180
TTGTTTACT GCCCTAATGG GAATGTTCAA TTCCATATTG ATGGGTAGAG TGGTGGCAA	240
GCTTCCTTTT ACCCCTCTTT CTTACATCCA AGGACTGTCT CATCGAAATC TGCTGGGAGA	300
TGACACCACA GACTGTTCCC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC AAAGAGGCCN AGGGTCACAG GGTGGTTATC TCACTTCGCA GCTTTTCCTT	60
TCTGAGGCCA GAAAAGGAAG GGGTTTGCCT TCCTCTAGTA TTTATTCTTC TGGACTACAT	120
CAAGTACTCT AAGCCTGATG TTAGGCAATA ACTGCCCAT AGCCATTGGC TACATTGGC	180
TCTTTCTTGT TCCAACAATA TTAGTGATCT GTGGNACAGG ACACACTCTT TGTTTGCTAG	240
CTACAAATTC TAACAAAGCT AAGTTTATT CATGTAGNTA TTCACAAATT AANACAACAC	300
ACACACCACA CACACACACA CACACACACA CACACACATA CCACAAAACC	360
CAGAGATCAC CAAATACTAT ATAAATAAAC AAGCCCAAAG TCACAGATCA GGGACACTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

GAATTCGGCC AAAGAGGCCT AGACGTCCAA GAAAAACAT TTGGTGAAAG TCAGGATTTA	60
CCTTTGAAAT CCGACTTGGG CACCAGGGAA GATAGTAGTG TTGCATCTAG TGATAGGAGT	120
AGTGTGGAGC GAGAAGTGGC AGAACACCTA GCAAAAGGCT TCTGGAGTGA CATTGGCAGC	180
ACGGCACTC CTTGCCAAAT GCAGTTATCA CCTGCTGTGG CCAAAGATGG CTCAGAACAG	240
ATCTCACAGA AACGGTCTGA GTGTCCTGG TTAGGTNTCA GGATTAGTGA GAGCCAGAA	300

CCAGGTCTCA C

316

## (2) INFORMATION FOR SEQ ID NO:456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC AAAGAGGCCT AGTCAGTCTG AGTTAGAAAA TCGACTCCAT CATCTAACAG      60
AGACTCTCAT CCAGAAACAG ACCATGCTGG AGAGTCTCAG CACAGAAAAG AACTCCCTGG      120
TCTTTCAACT GGAGCGCCTC GAACAGCAGA TGAATCCGC CTCTGGAAGT AGTAGTAATG      180
GGTCTTCGAT TAATATGTCT GGAATTGACA ATGGTGAAGG CACTCGTCTG CGAAATGTTC      240
CTGTTCTTTT TAATGACACA GAACTAATC TGGCAGGAAT GTACGGAAAA GTTCGCAAAG      300
CTGCTAGTTC AATTGATCAG TTTAGTATTC GCCTGGGAAT TTTTCTCCGA AGATACCCCA      360
TAGCGCGAGT TTTTGTAAAT ATATATATGG CTTTGCTTCA CCTCTGGGTC ATGATTGTTC      420
TGTTGACTTA CACACCAGAA ATGCACCACG GCCTCGAG      458

```

## (2) INFORMATION FOR SEQ ID NO:457:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCC AAAGAGGCCT ATCGAGGTTT GGTGACTGA TGGAAGCTTT TATTTCTTTA      60
ACCATTTATG CATTTTCTCA ATTTGCTACA ATAAACATAG ATTGCACAGG GGTGAATACT      120
AAGGAACTCG GAGGGTTAGG GTTAATTCTC GTGAAAGACC AAATATGTTT CTCTGGTTCT      180
CTCGAG      186

```

## (2) INFORMATION FOR SEQ ID NO:458:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

```

GAATTCGGCC AAAGAGGCCT AGCATTATGG TATATTTTAA ATTCATCAAG CTCATCTGTA      60
TGTGTCTTTT TGTCTTTTAA CTAAGAGAG GATTGGGGCT GGGATCATGG CAGCCTGCTC      120
TGATGTATTT CTCTCCACTC TATTTTATTA TTTTTTTAAA GAGTTCTAAC TTAAATACGT      180
GGACCAGCTA TTGGATAACT TTAATTCATA TATTTATCAT TCTTTCTATT CACTTTGCCA      240
CATACACACC ATGTGATGAT TTAAACCCG ATTTCTGTAT AGAGAATGTT AAAAGGATAG      300
CACTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

```
GACATGCTGT GGTTCACCG CGCACTCACC CTGCTCATCA TCCTCCGCCA CCTCACCAGG      60
AAGGACCCAC AGGGGCTGGG CGTGACGAGT GACGCCATCG CCGATGCCTG CCAGGCCCTG      120
GTGGGCCCCA CCGCCACAG CCGTTGCTGG TGATCTCCGG GATCCCCACC CACCTGGACG      180
AGGGCGTAGT CAGAGGCGCC ATCCGCAAGG CCTGCAACGC CCACGGCGGG GTCTTCAAAG      240
ACGAGATCTA CATCCCGCTG CAGGAAGAAG ACACCAAGAA GCCAAAAGAC AAGGCCGAGG      300
GCG                                                                                   303
```

(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

```
GAATTCGGCC TTCATGGCCT ACACCTTAAT TGCTGTTATC ATGGGCCTAA TTACAGTCAC      60
TGCAGTGGCC ACCACTGCCG GAATGGCATT ACACCACTCC ATTCAAGCGG CTCATTTTGT      120
TAATGGTTGG CAAGCCAATT CCATCCAAAT GTGGAATTCT CAACAAGGCA TCGATCGAAA      180
ATTGGCAAAT CAAATTAGTG ATTTAAGACA GTCTGTTATT TGGCTTGGAG ATCAGGTAGT      240
GAGTCTCGAG                                                                                   250
```

(2) INFORMATION FOR SEQ ID NO:461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

```
GGTGACGCCT GCTTCACATC TCTAATGAAC ACCCTCATGA CGTCGCTACC AGCACTAGTG      60
CAGCAACAGG GAAGGCTGCT TCTGGCTGCT AATGTGGCCA CCCTGGGGCT CCTCATGGCC      120
CGGCTCCTTA GCACCTCTCC AGCTCTTCAG GGAACACCAG CATCCCGAGG GTTCTTCGCA      180
GCTGCCATCC TCTTCCTATC ACAGTCCAC GTGGCGCGGG CCACCCCGGG CTCAGACCAG      240
GCAGTGCTAG CCCTGTCCCC TGAGTATGAG GGCATCTGGG CCGACCTGCA GGAGCTCTGG      300
TTCCTCGAG                                                                                   309
```

(2) INFORMATION FOR SEQ ID NO:462:

(i) SEQUENCE CHARACTERISTICS:



(A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GAATTCGGCC TTCATGGCCT AATGAAGAAA AGCAGAATTC CAAATTCAAA CTGTTGGAGT	60
GAGCCAAGTG GACAGACCCT CCATGAGTGC ACTTCTTCC AAGAAATCCC CAGATTTACC	120
CCATAGAGGT CTGGGATTAC CTGGAATATA ATATGAAAAA CATTTTTTAG GCTGGGTGTG	180
GGGCTCACAC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CGGGCGGATC ACCTGAGGTT	240
GGGAGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:463:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GAATTCGGAA CAATGGGGGT TTCAAACAT AAAAGTGAAA GTCCTTGTGA ATCTCCTTAT	60
CCAAATGAGA AAGACAAGGA AAAAAATAAG TCAAATCTT CAGGCAAAGA AAAAGGCAGT	120
GATTCATTTA AATCTGAGAA GATGGATAAA ATCTCCTCCG GTGGCAAAAA GGAGTCCAGG	180
CATGATAAAG AAAAGATAGA AAAGAAAGAG AAACGGGACC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 527 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

CTCGAGGCGT GTGGGATCAT GAGGCAAAGA AAGTCCAACG AGGGAGAGAG GAGAGTGAGG	60
GATGAGAGGG GACACTTGCT CCATCCTAGT CCCACGCGG CCCAGCTGGC TTCCTTTTCC	120
AGAATATCTC CTGCTATAA CCTGGCAGCA GGGGAGCCAA GGTCTTCTC CATCCTTACA	180
GGCACTGAAC CAGGATGTAG GCGCACACTG CTGTGTTCTC TCTGGCCCAT CCTCTCTAAT	240
TGTCTTTCCC TTCCCAGGTC ACAGGATGCT TATTCTCATC TCCAGGCCTT TGCACGGGCC	300
GGGCCTGCTG CCAATCCCCG CACTCTCCCC TTCTTAGGGC CAGGCTAACT CTTCCCCATC	360
CCCGGGGCTC AAGCGTTCAG GTCTCTTCCA AAAGCAGTCT TGGTGGTCCC TGCCACGCGT	420
TACCCTCCTC TCAAGTCACC CGGGAGGTGG AGGTTGCTGT AAGCCAAGAT CGCAGTGAGC	480
TGAGATTGCA CCATTGCACT CCAGCCTAGG CCATGAAGGC CGAATTC	527

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTTGATTC	60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTGCT	120
ACTGCTCTTT GAAATACAAC CAGTGTTC A GCCAGACTGT TTTCTGCTT CTGCTCCCCT	180
TCTCCTCCTC CCAGCACATC TGTGAATTCT TTGACTGGTT TACCACTCCC AAACCTCCTCC	240
CCAGCAATGC AGATCTTCTA CACCCCTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC	300
CTCCCGAACA GCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 348 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

GGTCATTCTT TCCATCGCTG CGGACACGGG AGTCAGAAGT GAAACAGTCC TGTCTCGTG	60
GGGCTTACGT TCCAGGCGCA AGAGCCACAG GTAGTCGAAT TGGGAAACCG CCTCGGATGT	120
CACATAAGCG CCCAGGGAGG ACAGGGCAGG ACAGGGCCTC CCTGGGGAGG TGACTTGAGT	180
CAAGACTCAA AAGAGGGAAG CGAGGGAACA AGCCATGCGA GGAACCTAACG AAGGAACATT	240
CCAGAAAGAT TTCACATCCC AAGCCTAAGG TCCAGGGGCA GCAGGCATTG AGGCGGATGT	300
GGCTGGAGTG GAGAGAAAGA GGAATTAAAA GGATGGCATG AGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 293 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

GAATTCGGCC TTCATGGCCT ACGAGGAAAG ATCTAATTAT CATGGACCTG CGACAGTTTC	60
TTATGTGCCT GTCCCTGTGC ACAGCCTTTG CCTTGAGCAA ACCACAGAA AAGAAGGACC	120
GTGTACATCA TGAGCCTCAG CTCAGTGACA AGGTTACAA TGATGCTCAG AGTTTTGATT	180
ATGACCATGA TGCCTTCTT GGTGCTGAAG AAGCAAAGAC CTTTGATCAG CTGACACCAG	240
AAGAGAGCAA GGAAAGGCTT GGAAAGATTG TAAGTAAAT AGGCTGGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 279 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) M LE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

GAATTCGGCC TTCATGGCCT AATAAATTGC CAGCATANTA AAAAAGTCC TTACTCTCAA	60
TTGCTACACC TTTTCACAGG CAAAAGGTTT TATTCTCTCC TAAATTAATT TTATCCCGTT	120
TTTTTTTACC ACCTAACTTT TGCCTTTTAT TCAGAACTAA TGTATTTTTT TCTTATTGTC	180
GTTTTTTTTT TCAAAATTCC CTCCTCGGTG GAAAGTAAAG GAGTAGGAAC ATACTATTAT	240
TCAACCAACA TGCAGCAACC CTTACGTACG GTCCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

GAATTCGGCC TTCATGGCCT AAGTTTTGAA AAAAAAATC TTAAAGTGA TTGTGAGTAG	60
ATTTTTTTAA GGAGCATTTT TATAATATT TTCTGAATC CTTGCATATT TGACAGTGTC	120
TTTCTATTGT GTTTATGTGT GGCAGCAATT TACTTTATAT CAAAGTTTTT TGTTTTTGTT	180
TTTGTTTTGT GAGACACAGT CTCACCTAT CACCCAGGCT GGAGTGCAC TGGCACTATCT	240
CGGCTTACTG CAGCCTTGAC CTCCAGACT CAAGTGATCC TCCACCTGC CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

GAATTCGGCC TNCATGGCCT ATGTTTTTTA TATATGGATT TATTTTTGCT TTTTAGGCT	60
GATTCAGTGT GAAAATGAGG TAGGGAAATT GTTGTATATC ACAGAAATCC CAGAATTAAT	120
ACTGGAAGAC CCCAGTGAAG CCAAAGAGAA CCTCATTCTG CAAGAAACAT CTGTGATAGA	180
GTCGCTGGCT GCAGATGGGA GCCCAGGGCT AAAATCAGTG CTATCTACAA GCCGAAATTT	240
AAGCAACAAC TGTGACACAG GAGAGAAGCC AGTGGTTACC TTCAAAGAAA ACATTAAGAC	300
ACGAGAAGTG AACAGAGACC AAGGAAGAAG TTTTCCTCCC AAAGAGGTGA GAAGGGACTA	360
TAGCAAAGGA CTCGAG	376

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

GAATTCGGCC	TTCATGGCCT	ACAAGATTGG	CAAGATGCTT	ATTTTGGTG	CCATATTGG	60
CTGCCTTGAC	CCAGTGGCAA	CACTAGCTGC	AGTTATGACA	GAGAAGTCTC	CTTTTACCAC	120
ACCAATTGGT	CGAAAAGATG	AAGCAGATCT	TGCAAAATCA	GCTTTGGCCA	TGGCGGATTC	180
AGACCACCTG	ACGATCTACA	ATGCATATCT	AGGATGGAAG	AAAGCACGAC	AAGAAGGAGG	240
TTATCGTTCT	GAAATCACAT	ACTGCCGGAG	GCTACTCGAG			280

## (2) INFORMATION FOR SEQ ID NO:472:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

GAATTCGGCC	TTCATGGCCT	AGCAGTAAGC	CAGGATTGCA	CCACTGCACT	CCAGCCTGAG	60
TGACAGAGTG	AGACTCTGTT	TCAAAACAAA	ACAAAAAAT	TTACAGCAAT	CCTGGTCCCT	120
ACCATGGAGC	ATGTGTTACA	GGAAAACAGC	CAGTCCACTC	TGCAACCAAT	TTGGACATGG	180
CCCTGAAAAT	CCTTTTTCGA	CAGAAAGGGG	AAAATAAGAG	TACTGGCAGA	AAGTCAGATG	240
CTGGGGATGC	CTCACCTCT	AGTCTCATGA	CTATCACACA	TGAGACGGTG	TTCCGCTGTA	300
ACTTTTCCCC	CCCCCCCCC	CGTTTGTGGA	TCTGAATCTG	GAAAAGAGCT	TGGAGAGATT	360
TACAGGCCCTC	CTCTTCTGCA	ATCAGTAAGA	GTACCATGTG	GAGGCAGAGA	GCCAGAATAG	420
GTTGTGGGGC	TTCTCGAG					438

## (2) INFORMATION FOR SEQ ID NO:473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC	TTCATGGCCT	AGAACAGCTC	TCCAATTCAC	ACTTATCTGT	ACAATGTACA	60
TTAATAACTA	ATTTGTTAGA	TGATTAATAC	CAATAATTAA	CTTGCTAGAG	GACCCAGGAA	120
ACAGAAATATC	TGCAAGGCCC	AGAGTAGATC	ATAAATAAAT	AGGAATGCAG	ACATAAGATG	180
TTCAGTTTTG	GAACAGTAAA	GCTATAATGA	GTTTTCTTTA	AAATCAAACA	ATTGTACAAT	240
GCATTATAGT	CTACAACTTA	TTCTGTAGTT	CAAATAAATA	AAACTTTCCC	CTGTTACAGA	300
AAGACAGCCC	TCCTCCCAGC	AACATTTTCAG	ACTGGATGGA	TTGATTCCCTC	ACCTGACATA	360
ACTCTAAAAT	CCTCACTGAA	GAAGCCAGGA	AGTCAAATG	AGGCTGAAGA	CCTGAAAGTA	420
CAGGGGACTA	AACCCAGAAA	GCAGTAGGCC	ATGAG			455

## (2) INFORMATION FOR SEQ ID NO:474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC	TTCATGGCCT	ACATGGACCT	CCTGCACAAG	AACATGATC	ACCTGTGGTT	60
CTTCCTCCTC	CTGGTGGCAG	CTCCAGATG	GGTCCTGTCC	CAGGTGCAGC	TACATCAGTG	120
GGGCACAGGA	CTGTTGAAGC	CTTCGGAGAC	CCTGTCCCTC	ACCTGCGCTG	TGAATGGTGA	180
GCCCTTCAGT	GGTTATTTCT	GGACCTGGAT	CCGCCAGNCC	CCCGGGAAGG	GCCTGGAGTG	240
GATTGGGCAA	ATCAATTATG	ATGGAACCAC	CAAGCACAAC	CCCTCCCTCG	AG	292

## (2) INFORMATION FOR SEQ ID NO:475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC	TTCATGGCCT	AAGGGTGGGC	TTTAATGGCA	GCTGGGGTAA	AAGGAAACAA	60
AAACAGTAAT	TCTGAAGAGC	ACAGGGAACA	GGCAGCCAGG	ACCAGCCTGG	CCCATTCCAG	120
GCCAGCTGAG	CTGAAATGCT	GATTCTGTCC	AGGGGGCTGC	TGTATGTGTA	GACTGGTGGC	180
AGTCTTGGGG	ACTGAGGCCT	CTTGAGAGAG	AGGGAAGACT	GTCGGCTCAG	AAGTCCATGG	240
AGCTGTGGGC	CAGGTAGTCC	TTGCGACCGA	TGTTGCTGAC	CTGCTTGGTC	TGCATAGCCT	300
CGAG						304

## (2) INFORMATION FOR SEQ ID NO:476:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GAATTCGGCC	TTCATGGCCT	ACCAGCTCTC	TTCTAAAAGA	GAAGTGGGTG	GGCAGACTGA	60
ACTGTTTGGT	GGCCCCAACC	ACAGGAAGCT	GCAATTCTCT	GGCTTAGGGT	GATACTTTTG	120
CCCTCCTTGT	GCCCTCTCT	GGACGCTCTG	CACCAACCCC	AGGCTACTGA	GCCACCTTCC	180
CTCTCATGC	CTTCCCTGAG	CTTTGGTGCA	TCTCATCTGG	ACTATGGGTT	GTA CTGTGAC	240
CATCCCAACA	CCTCACCCTC	TGTCTACAAG	GAAATGGGAG	GTGGAGCCTC	CTGGCTGAGA	300
AATTGTTTTG	CAAATGGATC	TCGAG				325

## (2) INFORMATION FOR SEQ ID NO:477:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GAATTCGGCC	TTCATGGCCT	AAGCTCATCA	ACGAGAAGCT	CATCAGAACC	AAGGGGCTGT	60
GGGGCCCCGT	CCATGAGCTG	GGCCGCAACC	AGCAGCGGCA	GGAGTGGGAG	TTCCACCAC	120

```

ACACCAAGGCCACCTGC AACCTGTGGT GTGTGTATGT AGACG GTCTTGGGCA 180
TTCCTCGA CCGTGCCAAT ATTGCTCTGT GGCCCCCAGT TCGGGAGAAG AGAGTCAGAA 240
TCTACCTGAG CAAGGGTCCC AATGTGAAAA ACTGGAATGC ATGGACCGCA CTGGAAACTC 300
GAG 303

```

## (2) INFORMATION FOR SEQ ID NO:478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

```

GAATTCGGCC TTCATGGCCT AGTTGTTTCTAG AATCCACACA GCTCTGAATT ACCAACGCTG 60
AATTTCCAAG ATACTGTAAA CACCCTGACC AACAGTCCAG CCATCCCATT GGAACATCT 120
GCATGTCAGG ACATACCCAC TTCTGCCAAT GTACAAAATG CAGAGGGTAC CAAATGGGGA 180
GAGGAGGCAT TGAAAATGGA TCTTGACAAT AACTTTTATT CAACTGAGGT GTCAGTTTCT 240
TCCACTGAAA ATGCTGTCAG TTCTGACCTC CGGGCAGGGG ATGTACCTGT TTTATCTTTG 300
AGTAATAGCA GTGAGAATGC CGCCTCTGTG ATCAGCTCGA G 341

```

## (2) INFORMATION FOR SEQ ID NO:479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT AAGTTTTGAA AAAAAAATC TTTAAGTGA TTGTGAGTAG 60
ATTTTTTTAA GGAGCATTCT TATAATATTT TTCCTGAATC CTGTCATATT TGACAGTGTC 120
TTTCTATTGT GTTTATGTGT GGCAGCAATT TACTTTATAT CAAAGTTTTT TGTTTTTGT 180
TTTGTTTTGT GAGACACAGT CTCACCCTAT CACCAGGCT GGAGTGCAT GGCATATCT 240
CGGCTTACTG CAGCCTTGAC CTCCAGACT CAAGTGATCC TCCACCTGC CTCGAG 296

```

## (2) INFORMATION FOR SEQ ID NO:480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC 60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATA CACAGTTCCC TTGCGGAGA 120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA 180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA 240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATCAAC GATGGCTTCC AATAACATGA 300

```

CTCTTTTCTT ATGCC TCTGAAGATG ATGTTGGCTA CTATT TCTCTTTACA 360  
CTTACCCATG GGAAGTCGAG 380

## (2) INFORMATION FOR SEQ ID NO:481:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GAATTCGGCC TTCATGGCCT AAGTTTTGAA AAAAAAATC TTTAAGTGGG TTGTGAGTAG 60  
ATTTTATTTAA GGAGCATTTT TATAATATTT TTCCTGAATC CTTGCATATT TGACAGTGTC 120  
TTTCTATTGT GTTTATGTGT GGCAGCAATT TACTTTATAT CAAAGTTTTT TGTTTTTGTT 180  
TTTGTTTTGT GAGACACAGT CTCACCTAT CACCCAGGCT GGAGTGCCT GGCCTATCT 240  
CGGCTTACTG CAGCCTTGAC CTCCAGACT CAAGTGATCC TCCACCTGC CTCGAG 296

## (2) INFORMATION FOR SEQ ID NO:482:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC 60  
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATAAC ATCAGTTCCC TTTGCCGAGA 120  
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA 180  
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA 240  
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTC AAC GATGGCTTCC AATAACATGA 300  
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA 360  
CTTACCCATG GGAAGTCGAG 380

## (2) INFORMATION FOR SEQ ID NO:483:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

GAATTCGGCC TTCATGGCCT AGGCTGGACA GACTTTCTAA TGAACCCAAT GGTTATGATG 60  
ATGGTTCTTC CTTTATTGAT ATTTGTGCTT CTGCCTAAAG TGGTCAACAC AAGTGATCCT 120  
GACATGAGAC GGGAAATGGA GCAGTCAATG AATATGCTGA ATTCCAACCA TGAGTTGCCT 180  
GATGTTTCTG AGTTCATGAC AAGACTCTTC TCTTCAAAAT CATCTGGCAA ATCTAGCAAC 240  
GGACAGCTCG AG 252

## (2) INFORMATION FOR SEQ ID NO:484:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

```

GAATTCGGCC TTCATGGCCT ACTACATCAA GCACCAGAAC CGCCAGCTGC GCGCCCTGTT      60
GCTCAGCCAC CAGTTCAAGC GCCGGGAGGC CGACCAGACC CACGCACAGA ACTTCTCCTC      120
CGCCGTGAAG TCCCGGTCC AGGTCACTCT GTCCTGTGCC CTCGCCTTCC TGGCCTGCGC      180
CTTCCTACTG ACCACCGCGC TGTATGGGGC CAGCGGACAC TTCGCCCCAG GCACCACTGT      240
GCCCCTGGCC CTGCCACCTG GTGGCAATGG CTCAGCCACA CCTGACAATG GCACCAAGCT      300
CGAG

```

## (2) INFORMATION FOR SEQ ID NO:485:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATA CACAGTTCCC TTTGCCGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GAACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:486:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATA CACAGTTCCC TTTGCCGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GAACTCGAG

```



## (2) INFORMATION FOR SEQ ID NO:487:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATA C ATCAGTTCCC TTGCCCAGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GGAACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:488:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATA C ATCAGTTCCC TTGCCCAGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GGAACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:489:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

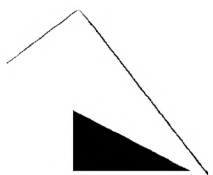
## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```

GAATTCGGCC TTCATGGCCT AGGTTTACAG GCATACCTCA TTTTATTGCA CTTCACTTTA      60
TTGTGCTTTG CAGATAATTG TGCTTTTAC AAATTGAAGG TTAGTGGCAA CCCTGTGTTG      120
AGCAAGTTCA TTGGCAACAT TTTTCCAACA GCATGTACTC ACTTGTCTCT ATGTCACATC      180
TTGATAATTT TCATATTTCC AACTTTTTC TATCATGAT GATGATTAGT GATCTTTGTT      240
ACTGTNGTAG TTGTTTGTG GGCACCACAC TGTATGCAGN AAAGCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:490:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 369 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```
GCTACCTTAA AAAATAGATA CTCCACTAGA GGCTGTGCTT AATTCAAATC CATGTGTGTG      60
CCTGCATTAC ATGTGTGAAC ACGTGTCTTCT GTCGTGTGTG TCATGCACAT CTGTGTGTTG     120
CATAGCATAA GCCAAATGAA AATCATTGTG TCATGGGATT CATATGAGGA ACAAATTTAA      180
ATTTGAATAC AGTCAGATAA CTGCCACGCA GGGCATTGTT GGAACCATCC CCGAATGCCC      240
TGATGTGATT TCCCTCAGAA AATCCTTGTT ATTAGAGGAG AAGGTCTGGG CAGGGGCAGC      300
AGCATCTCAG ACATCAAGTC AACTTTATCA TCTACTACAT CAGCACTGAA GTCCAACGGC      360
ATCCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:491:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

```
GAATTCGGCC TTCATGGCCT ATGCTTTTTT CTTTATTCTT TGTAGTTGTT TAGGAGTGGG      60
GGGCCTCGCA GAACACCTAG TCCAGCCAC TGCCAGAGC AGGTGTGTCC CTTTCATACT      120
TCAGTCCACT TTAAAACAGC CTTCCCCAC CCCCTTCTAT GGTAGCAGTT CTCCTCGGGG      180
TCTCCATGGA CACCCTGTGC CCCAAGCCGA TGGCCCCACC CAGCAGCATC AGCACAGCTG      240
CCCCCTTCT CCGCAGAGCA GGCTCTCCTT TACGGGACTC TCCTCTTCCC TCCCACCCCC      300
CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:492:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 275 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

```
GGAATAAGAA GAGAAAGCCA AGGAAGACAA GGGCAAACAA AAGTTGAGGC NGCTTCACAC      60
ACACAGATAC GGAGAANCCA GAAGTGCCAG AGTCAGCATT CTGGAAGAAA ATCATAGCAT      120
ATCAACAGAA ACTTCTAAAC TATTTTGCTC GCAACTTTTA CAACATGAGA ATGTTAGCCT      180
TATTTGTGCG ATTTGCTATC AATTTCTCTT TGCTCTTTTA TAAGGTCTCC ACTTCTTCTG      240
TGGTTGAAGG AAAGGAGCTC CCCACGAGGC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:493:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 301 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

```
GCCTTGGGCC CTCGCAAAGT CTTGGAGAAG CAGTTTTACT TCCCTTCCTT CACTTAGACC      60
CCATTCTTTA GCATTCTTC TGAAGCTCCC ACAAGACCCA AGAATGGCTG CTGCAGTGTC      120
TCTCTCTCAG TCAGGGACCC TGGTTGAGGT TTGTGTATTG TTCATTATTG CTCTGTTTTG      180
CAGTTGTTCA AAGTTGGAAG ACTTGCCTGC GGAGCAGTGG AACCATGCCA CAGTCCGCAA      240
TGCCTTAAAG GNACTGCTCA AAGAGATGAA CCAGAGCACA TTAGCCAAAG AAACCTCGA      300
G                                          301
```

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 389 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```
GGAGATGTC TACAGAAAAG GTAGACCAA AGGAGGAAGC TGGGGAAAAA AGAGTGTCGC      60
GAGACCAGAT CAAGGGACCG GACAAAGAGG AGGAACCACC AGCTGCTGCA TCCCATGGCC      120
AGGGGTGGCG TCCAGGTGGC AGAGCAGCTA GGAACGCAAG GCCTGAACCT GGGGCCAGAC      180
ACCTGTCTCT CCCGGCCATG GTCAACGACC CTCCAGTACC TGCCTTACTG TGGGCCCAGG      240
AGGTGGGCCA AGTCTTGGCA GGCCGTGCCC GCAGGCTGCT GCTGCAGTTT GGGGTGCTCT      300
TCTGCACCAT CCTCCTTTTG CTCTGGGTGT CTGTCTTCTT CTATGGCTCC TTCTACTATT      360
CCTATATGCC GACAGTCAGC GCACTCGAG                                          389
```

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 438 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```
GTGGCGATTG GTCCTGTCAT GGTATTATCA GCCATGTGGT GGATGGCTAC TTGTCTTCTA      60
AGCCACTTGC CTTCTGATCG CTGGACTGAC TCTCTCGCCC TCTCTTGGTG CAGTCCTCAG      120
GAGGCTCGGT CACACTCTCC AAGAGCACAG CCATCATCTC CCACGGTACC ACAGGCCTGG      180
TCACATGGGA TGCCGCCCTC TACCTTGCA GATGGGCCAT CGAGAACCCG GCAGCCTTCA      240
TTAACAGGTG ACCTCGGGGC ACAGGGCAGG GCACCGAGGC AGGCTTACCC TGGTGCAGTC      300
GAAAACACGG TCCCCTTTCC TCCCGCCAGG ACTGTCCTAG AGCTTGGCAG TGGTGCCGGC      360
CTCACAGGCC TTGCCATCTG CAAGANGTGC CGCCCCCGGG CATACATCTT CAGCGACCTT      420
CACAGCCNGG TCCTCGAG                                          438
```

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 281 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

GAATTCGGCC	TTCATGGCCT	AGGTAAAATT	TGTATAACAA	AAAATTAACC	GTTTTAAACT	60
GAATAATTCA	GTGAGATTTA	GTGAATTCAC	AATATTGTGC	AACTGCCACC	TCTTTCTACT	120
TCTAAACCAT	TTTCTCATA	CCAAAAGTAA	GCCCCGTACC	TATGATGCAG	TCCCTTCCCG	180
TTTCCTTCTC	TCCTCAGTCC	CTGGCAACCA	TCACTCTGCT	TTCTGTCTCT	GTGGATTTAC	240
TTATTCTAAT	ATTTAATTTC	AGTGGGAATC	CCTGCCTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

GAATTCGGCC	TTCATGGCCT	ACACTTAGAG	AGGCAGTCGG	GATGGAGGGT	CGAGTTGAAG	60
ACAGGGAGGG	GTGAGGAACG	AGCAGAGGCC	AGTTGTTTGG	CCACTTGAGG	GAGTTTGGAC	120
TTGTCCCGAG	GGCACTAGGG	AGCCGTGAAG	GGCTTCAAGC	CGGGGAGGAT	CATGAACATT	180
TCCCCAGAGG	AGCTCAAAAT	GGAGTTGCCG	GAGAGACAGC	CCAGGTTCGT	GGTTTACAGC	240
TACAAGTACG	TGCATGACGA	TGGCCGAGTG	TCCTACCCCT	TGTGTTTCAT	CTTCTCCAGC	300
CCTGTGGGCT	GCAAGCCGGA	ACAACAGATG	ATGTATGCAG	GGAGTAAAAA	CAGGCTGGTG	360
CAGACAGCAG	AGCTCACAAA	GGTGTTCGAA	ATCCGCACCA	CTGATGACCT	CACTGAGGCC	420
TGGCTCCAAG	AAAAGTTGTC	TTTCTTTCGT	TGATCTCTGG	GCTGGGGACT	GAATTCCTGA	480
TGCTGAGTC	CTCAAGGTGA	CTGGGGACTT	GGAACCCCTA	GGACCTGAAC	AACCAAGACT	540
TTAAATAAAT	TTTAAATGC	AAAACCTGAG				570

(2) INFORMATION FOR SEQ ID NO:498:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

GAATTCGGCC	TTCATGGCCT	AGGTGCATGC	CATCAAATAC	TCTAACGAGA	CATTTTAAAT	60
GAAAGACTTA	AACCAGATAG	GCCACAATGA	ACCAAATTAG	AAATCTGAAC	ATGTCACCAC	120
TTGCAGCATA	AAGGAATATA	AAAGGGCAGA	GCAAAGTCTT	TTTTCCTAAG	GTGAATATTT	180
CTAAGGTAAG	TATTCATTG	TAAAAGTTT	TTTTTTCCAN	CANGTCTGAA	NNCTTTTAC	240
CANNNGGNGA	GNATTACAAC	AAAACATCCC	TNGGTTAAAA	AAAAAAAATA	CCATCTTGCA	300
ATTCAGCACA	CACCNGCAGC	TGGTGTGCTC	ATCCAAACCN	ATCAGTAGGC	TAAGAGNATT	360
TNAAATTCCA	TACATATGAG	TTTAGGTATT	AATGCCGATT	ACACAGTACA	CAGTACAGAG	420
GGAGGTCCCT	ATATCCACAC	ACACACACAC	CCCATCCAGC	ATTTACACCN	AAAGCCTTAC	480
CCTCGAG						487

## (2) INFORMATION FOR SEQ ID NO:499:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT AACAAATTCAA AGAAACTTTT TTCTGAACCA TTTGAAATTT      60
GCCAGCCTGA TGTCCCATCA CCCCCCAAGT ATTTTAGCAT CTATGCAACA AAACATTTTC      120
TCTGACAAAA CCACATCAGA ACTCTCAAAT CAGGAAACAA ACATTGATAC ATGTCTATCA      180
ACTAATCCTG TCTTCAATGA CATTTTACCG ATTGTTCCAA TGATGTCAGC ATCACGGGTC      240
ACATTTAATA GTTGCGTCCT TCAGTCTCGA G                                     271

```

## (2) INFORMATION FOR SEQ ID NO:500:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GCACTTCTGG ATGTTGGTTC TCTTTGTCAT TTTCAACAGT CTGCAGGGAC TTTATGTTTT      60
CATGGTTTAT TTCATTTTAC ACAACCAAAT GTGTTGCCCT ATGAAGGCCA GTTACACTGT      120
GGAAATGAAT GGGCATCCTG GACCCAGCAC AGCCTTTTTT ACGCCCGGGA GTGGAATGCC      180
TCCTGCTGGA GGGGAAATCA GCAAGTCCAC CCAGAATCTC ATCGGTGCTA TGGAGGAGGT      240
GCCACCTGAC TGGGAGAGAG CATCCTTCCA ACAGGGCAGT CAGGCCAGCC CTGATTTAAA      300
GCCACGTCCA CTCGAG                                     316

```

## (2) INFORMATION FOR SEQ ID NO:501:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GACAAAGACC AGCAATGGAT CACTTGGAGT CCTTTATTGC TGAATGTGAT CGGAGAAGTG      60
AGCTCGCCAA GAAGCGGCTG GCAGAAACAC AGGAGGAAAT CAGTGCGGAA GTTTCTGCAA      120
AGGCAGGAAA AGTACATGAG TTAAATGAAG AAATAGGNAA ACTCCTTGCT AAAGCCGAAC      180
AGCTAGGGGC TGAAGGTAAT GTGGATGAAT CCCAGNAGAT TCTTATGGAA GTGGNAAAAG      240
TTCGTGCGGA GGAAAAAGGA GNACTCGAG                                     269

```

## (2) INFORMATION FOR SEQ ID NO:502:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs

( PE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAATTCGGCC	TTCATGGCCT	ACTTGTCTCA	CTCTGCATCA	TCCCTTAGTC	TACAACAGGC	60
CTTTTCTGAA	CTTAGACGTG	CCCAAATGAC	AGAAGGACCC	AACACAGCAC	CTCCAACTT	120
TAGTCATACA	GGACCAACAT	TTCCAGTAGT	ACCTCCTTTC	TTAAGTAGCA	TTGCTGGAGT	180
CCCAACCACA	GCAGCAGCCA	CAGCACCAGT	CCCTGCAACA	AGCAGCCCTC	CTAATGACAT	240
TTCCACATCA	GTAATTCAGT	CTGAGGTTAC	AGTGCCCACT	GAAGAGGGGA	TTGCTGGAGT	300
TGCCACCAGC	ACAGGTGTGG	TAATTCAGG	TGGTCTCCCC	ATACCACCTG	TGTCTGAATC	360
ACCAGTACTT	TCCAGCGTAG	TTTCAAGTAT	CACAATACTC	GAG		403

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 282 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GTTTGGATGA	TTGGTGGCGT	GTACGCAGCT	GCTATGGCCT	GGGCCATCAT	CCCCCACTAT	60
GGGTGGAGTT	TTCAGATGGG	TTCTGCCTAC	CAGTTCCACA	GCTGGAGGGT	CTTCGTCCTC	120
GTCTGCGCCT	TTCCTTCTGT	GTTTGCCATT	GGGGCTCTGA	CCACGCAGCC	TGAGAGCCCC	180
CGTTTCTTCC	TAGAGAATGG	AAAGCATGAT	GAGGCCTGGA	TGGTGCTGAA	GCAGGTCCAT	240
GATACCAACA	TGCGAGCCAA	AGGACATCCT	GAGCGACTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 222 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GAATTCGGCC	TTCATGGCCT	ACTGAGAAAA	AAAATCAAAT	CTAATTTTAA	AATGAAGGTA	60
TTTAAACCA	TGGCACAAGG	GAGCCTTATT	TATGGAGCTG	GTGGGAAGCC	AGGATGTTTC	120
CAATCCGCTG	CTCTTACAGG	AGCCTGTGCC	TCGCCAGTTC	TGTGCTGCAG	TGGGCAGCCA	180
ACTGAAGTGC	ATGAGTCAAA	TGCACGAAGC	AGCAGACTCG	AG		222

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 192 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

GAATTCGGCC TTCATGCCCT AGTGGTGCAG TTTTTCAGGA TTGTAGAGAT GCTAACAAAT	60
TACAGGTTCT CTCATGCAAA CACTTTGCTA GGAATTATAT ATATCAAGTT TATATTTGGC	120
AATCAGGCTT TAGAAGCAGA AGGTCTAGCT ATCTCAAACCT ACCACCTACC TCCCTCACCA	180
AAGCCGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

GAATTCGGCC TTCNTGGCNT AGTAAAATTG TTAAAGTTGA CAGGATCAGT TTTGGAAGAT	60
GCTTGGAAGG AAAAAGGAAA GATGGATATG GAAGAAATTA TTCAGAGAAT TGAANACGTT	120
GTCCTAGATG CAAACTGCAG TAGAGATGTA AGACAGATGC TCTTGAAGCT TGTAGAACTC	180
CGGTCAAGTA ACTGGGNCAG AGTCCANGCA ACTTCAACAT ATAGAGGNGC NACACCAGAA	240
AATGATCCTA ACTACTTTAT GNATGNACCC ACATTTCATA CATCTGATGG TGTTCTTTTC	300
ACTGCAGCTG ATCCAGATTA CCANGAGAAA NTCCAAGAAN NACTTGAAAG AGANGATCCT	360
CGAG	364

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

GAATTCGGCC TTCGATTGAA TTCTAGGACT TGACAGAATT CGAGTTATCC TTCTCAGAAC	60
ATGTGCAGAG TCTCTTTTGG CCTCACCATG TGGTCCTGTG CTCTTTCAGG TGGGAGTTTT	120
GGGGCCTCCA GGGCAGCAGG CACCACCTCC ATATCCCGGC CCACATCCAG CTGGACCCCC	180
TGTCATACAG CAGCCAACAA CACCCATGTT TGTAGCTCCC CCCCAGAGAC CCAGCGGCTT	240
CTTCACTCAG AGGCCCTACCT GAAATACATT GAAGGACTCA GTGCGGAGTC CAACAGCATT	300
AGCAAGTGGG ATCAGAGCAA TCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:



GAATTCAGTG AGTGGGCATG GCTGATCTTG TGCAAATTAA AAGTTATGGG GCATAAGAAT	60
AGCAAAAGTT GAACTTCTTT TAAAAAGGAA AGTACCCTGA GAGCCAGTAT TGGTTGAGGC	120
TCTTCAGTAT GCCCAGGTTG GCAGCACTGA GAACCGCAGG AACGGCCTGT TGTACAAAA	180
AGGAGATTGA CTCAGCTGCC CTTGGTGCAT CTGACTGACT ATGACTGCTG AGAGATTCCA	240
AGGACCCCTTA ATGCCAGGGC TAACCTCTCC ATGTGCAGTG AGACCTCTGG AGGAAGTGTC	300
ATCCTCTGGC TTTGTGTGGT ACTCATTATG GTGCAGTGCG GGCATGAAAT GAAGACACAC	360
AAATAGGCTC GAG	373

## (2) INFORMATION FOR SEQ ID NO:509:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

GAATTCGGCC TTCATGGCCT ACTCTTCCTG GCTCCTTCTC AGCCTTGTTG CTGTAAGTGC	60
TGCTCAGTCC ACCATTGAGG AACAGGCCAA GACATTTTTG GACAAGTTTA ACCACGAAGC	120
CGAAGACCTG TTCTATCAAA GTTCACTTGC TTCTTGGAAT TATAACACCA ATATTACTGA	180
AGAGAATGTC CAAAACATGA ATAATGCTGG GGACAAATGG TCTGCCTTTT TAAAGGAACA	240
GTCCACACTT GCCCAAATGT ATCCACTACA AGAAATTCAG AATCTCACAG TCAAGCTTCA	300
GTGCAGGCTC GAG	313

## (2) INFORMATION FOR SEQ ID NO:510:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GAATTCGGCC TTCATGGCCT ACTTGAACAA TTAAATATA GGAGAAGACT ATTTTTTAGA	60
AATGTTTTCC GTCGCCAACT TGTTAAAGCT TTATAGCACT TTGCATATTT TGGAGAATGT	120
CAACTATATT TTTATCAGAG CTGATTTGTT CCAGTGGAAC AACAGTGGCG TAGACATCGC	180
CCACAAGGTT CTGCATACTC GAG	203

## (2) INFORMATION FOR SEQ ID NO:511:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

GAATTCGGCC TTCATGGCCT ACGTGGTATT AAGGAGACAA TCTGAGGCAT TCCCACCAGT	60
CAATTTGACA TGCGGTTGGC AAGGTTCCCTC TTCCCTTCCC ACTTTAGATC GTGCCCTGTG	120

```

CCAGGTC  CCGAAAGAT TCATAGGCAC ACTTACAGCC T  AGTCT CAGCCATAGT  180
CATCCTAGCA ACTGCTAGTG TGGCTGTAGC ATCTATTACT GAATCAGTAC AAACAGCTGC  240
TTTTGTAGAT AATTTGGCCA GAAATGTTTC TAATGAACTT CTCTTACAGC AAGGTATAGA  300
TCAAAAGATT CTGACATC TGCAAGCCCT CGAG  334

```

## (2) INFORMATION FOR SEQ ID NO:512:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 537 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```

GAATTCGGNC TTCATGGCCN AAAGCTCTNG AAGGAGTATT AGAGTACAGA GTCTGAGNCT  60
NTGANAAATG GTGGTCAGAA GCCNTCTTCA TCAGATANAT TTCTCAGATG TGCCCCCTTCC  120
GCGGCAGAGG NGGATATTC A TCTCCTAGTT CATGTTTCA A ACATGTCAG TANGCAGATN  180
ANTCACTACC AGTATCTGCT TCTACTTTTC CTGCATGAGT CACTTATCCC TGCTTTCAGA  240
GAACNTAAGG AAAGATGTAG AAGCTGTAAC TGGCAGTCCT GCTAGTCAGA CATCCATTTG  300
TATTGGAATT TTACTTAGAA GTGCAGAACT GGCTCTTTTG CTCCATCCAG TGGATCAAGC  360
AAATACTCTT AAGTCTCCTG TTTCTGAAAG TGTGAGCCCA GTGGTACCTG ANTATTTGCC  420
TACAGAAAAT GGGGATTTTT TGNCTCAA AAGAAAACAA ATTAGTAGGG ATATAAATAG  480
AATTAGAAGT GTAAGTGT A ATCATATGTC AGACAACAGA TCTATGAGTA TCTCGAG  537

```

## (2) INFORMATION FOR SEQ ID NO:513:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCA AGGTGCTTAA TATTAAAAA AAAAAAAGTA TATCCAACCA  60
CAGATATACA GTTCTGCCTT TTTTTCCTT TTACCTAAAT ATACTCCATA AACAGTTTCC  120
ATGTTGTGTA ATATCTTCAT GTTCTACTT TTCAGTGATT GCTTAAATGT CCATTGGGCT  180
GATAGGTCAC AGTTCGCTAA CCCATCTCAT TGTGTTCAT TGGGATCTCC ACTTCCCTC  240
GAG  243

```

## (2) INFORMATION FOR SEQ ID NO:514:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT AGTCTCAAAA AAAAAAAAAA GATTATCCAC AAATGCAGTG  60
GNCCCTGGGA CAAGCCCTTT AAAGGAGTCA TNGAGAATCG TCTGTTGCTC ACAGCATCAA  120

```

```

TCNGGTATTT A CAAG CTGAGGATT CTAGTTTTC TCAGAG GGGTTCAGTC 180
TCTAAAAGAC GCTCTGAAAG CAGACCAGGC TGTTTTCTTG GAGCTTTTCA GGTTAGATTC 240
TCATGTGTGT ATCTTCCATC TACCACGATT ATTTGGCTAC CAGATGCCTT AGCAAGCTGA 300
ACAGTGAGCT CAGAAGTGCC ACCATCTATA GTAACATTCT CGAG 344

```

## (2) INFORMATION FOR SEQ ID NO:515:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 302 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

```

GAATTCGGCC TTCATGGCCT AAGAGTATCC GCTTACAGAA AAGACACTTC ATCACCTAGC 60
ACTGATTTAT GCAGCTTTGG TTTCATTGG GCTAAACTCT GAAGAACTGG ATGTAAAGCT 120
TATAATTGCC CCAGGAGTAG AAGCAACTGC CTTGATAATT CGACAAATTG CTGACCACAG 180
TTTAATGACC TCAAAGAGAG ATCCTCATGA ATGGTTGGAT AAATCCTGGC TTAAAGTTTC 240
ACCATCTGAG GAAGAAATGT ACTTACTTGA TTTTCCATGT ATTAACCCAA TCGTGGCTCG 300
AG 302

```

## (2) INFORMATION FOR SEQ ID NO:516:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AATCCATAAA 60
AGGCTTTTCA GATGTCTCTG CTGAAAATAA ATGGAGCTCT AGTAAATGTT AGAGTTTTTG 120
CTAGTAGAGT TTTGATGCTT TTTGTCTTTG TTCTACTACT GAGCTTGAC CAGGATGCC 180
TTCTTATAGT GCCATTCAAC ATGCAAGTTT CTTTTTCTGG GGCTGTGTGT CCAGGTGACT 240
TTATGAGTTA GGCTTTGGCA AATGCCAGAC TTGTTTCATCC TAACACTAGA ATGTAGGGAT 300
CCTGCATTCA GCATGACCCT CGAG 324

```

## (2) INFORMATION FOR SEQ ID NO:517:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT ATAGGCCANG AAGGCCGGCC TTCATGGCCT ATAGGCCATG 60
AAGGGTTGGT TGTGTTTTCC TAACAATGAA TAAGACAGAA ACCCTTGATA GCTAAATTCA 120
TCTGCAGTCA AACTAAGTTT TGCAGTGTCT TTTTAAGAGC CAGGCAATTC TACCACAAA 180
TAAATATAT TTTTAAATC CACATTACTA TACCACTGAC AAGTCTTTAC TTCAGAATC 240

```

```

ATCATTCA  ATGTGTAGC TGCTTCCAGA GTGTGTCTAA  T  TTGA ACAGGCGTTT  300
CAGAAAGAA  TGAGAGGCC AGTCTCAGTA ACTCCATGAA GGGTCCGAG CTCCTCTGTT  360
GAGGATTGG CTGTGAGAG GCAATGTTCC TATCATTGTC CAATTGGCC TTGTTATTC  420
CCACATTGGC TCGAG  435

```

## (2) INFORMATION FOR SEQ ID NO:518:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT ACCAGGTTGG CCAGGCTGGT CTCGAAGTCC TGACCTCAGG  60
TGATCTGCTC ACCTCGGCCT CTCAAAGTGT TGGGATTACA GGAGTGAGCC ACCGCACCGG  120
GCCAAAAAAT CCAATTTCTT AGAGATTAAA TAACCCTTCA GGATTATCAA AGGAAATAAT  180
TAGGGAAAGG TAGATGTTCT GTCCAGTAA GAGAAGAAAG TGGTCCAGAA ATTTTATCTC  240
CCATCAAATG ATCCATTTA CTTAAGTATT AAACCAAGTG ACATTCTTCA GTTAACTCT  300
GATAAATGAA TCATATTCCT CTTGAAAAT AACTTTTGTA TTTCGTGCTC TAAAAAGAGA  360
ACCACCCCTC GAG  373

```

## (2) INFORMATION FOR SEQ ID NO:519:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGGCCT AAACAATTAA TTGTGGGTGT CTGAGGGGGA AGGTCGCAGC  60
TTTGGGCAGC TTTGAGAAGC GGTACAAGAG TTCTGTGCCT GTGTGTCCAG CCCTGGAGCC  120
AGCCAGTGCA TTTATTTTAA GCTCTTAGAA GCAACTCCTT GGCCAGGAA TCGTGACCC  180
CTGAGATGGG TCCACGCATC TCTTACACT TCCTTCTCTC CGTGGGATAC TGGACTCGTG  240
CCTCTGCGCC CATTCTCTTC TCACGCATAT CCATGAGCTT TAATTTCACT TTCTGATCAC  300
GGTACGTCCA TAAAGCCAGT ATTACACTTA AATGAAGTAT TCTTTTTTGT AATCGTTTTT  360
TTTAGAAGGT AAACAAATTT AATAAAGCTA TCTCGAG  397

```

## (2) INFORMATION FOR SEQ ID NO:520:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GAATTCGGCC TTCATGGCCC ACATGAATCT NGTAATTTGT GTCCTACTTT TGTCCATTTG  60
GAAAAATAAT TGCACTGACTA CAAACCAAAC CAATGGATCT TCTACTACAG GAGATAAAC  120

```

```

TGTGGAATCA A GACAA AATTGAACTA CCTTAGAAGA AATCTA TTTTAGTTGG 180
TATTATCATC ATGGTTTTTG TCTTTATCTG TTTTGTAT CTCCATTATA ATTGTCTGAG 240
CGATGATGCG TCCAAAGCAG GAATGGTCAA GAAAAAAGGC ATAGCAGCCA AGTCATCTAA 300
AACATCATTC AGTGAAGCCA AGACAGCCTC TCAATGCAGT CCAGAAACAC AACCCATGCT 360
ATCTACTGCA GACAAGTCAT CTGATTATC GAGTCCAGAA AGGGCATCCG CACAATCCAG 420
CACAGAAAAA TTAATCAGAC CCTCAAGTCT ACAAAGCCA TCCAACCTCG AG 472

```

## (2) INFORMATION FOR SEQ ID NO:521:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GAATTCGGCC TTCATGGCCT ACACCTCTTC TTAGGGCTGT TTTTTTAAAC ACAATGATAT 60
TCTAAGGAAC AAGAGGTTGG CTATGGACTT TTGTATACCC ATGCCTATCA TATTTGCTA 120
AATGTTTGAT TATATAGAGA CATTCTTTG GAACCTTGAG CTGTGTGAAG ACAACACAAA 180
CCTGGCCATT CATGGCTGAC AGAAGGTTGG CCCTAACCCT GCTCAGGCCC ACACAGATTG 240
TGTAATATTC TTTGGATCTG GCTCTAGTCA GCAAAGTCTT GGTGTTGTAG GATACAGGTG 300
TCTTCATGCA TTCCATTTTA TACTCGAG 328

```

## (2) INFORMATION FOR SEQ ID NO:522:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

```

GAATTCGGCC TTCATGGCCT AGAAAAAGAA AAAGTAGCTG ATGAAGATGA TGTGGACAAT 60
GAGGAGGCTG CACTGCTGCA TGAAGAGGCT ACCATGACTA TTGAAGAGCT GCTGACACGC 120
TACGGGCAGA ACTGTCACAA GGGCCCTCCC CACAGCAAAT CTGGAGGTGG GACAGGCGAG 180
GAACCAAGGT CCCAGGGCCT CAATGGGGAG GCAGGACCTG AGGACTCAAC TAGGGAACT 240
CCTTACAAG AAAATGGCCC CACAGCCAAG GCCTACACAG GCTTTTCCTC CAACTCGGAA 300
CGTGGAATC GAG 313

```

## (2) INFORMATION FOR SEQ ID NO:523:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

```

GAATTCGGCT TCATGGCCTA GCGTGTGTG CATGCGAGCG CTCCTGCAGG CGTGTGCATG 60
GGGCCAGGTG TGCACGTGGA TGCCCGGGTG AGTGTGTGTG CATGCACGTG TGTGCACGCA 120

```

```

TGTCACATCTCCAGCCC CACCTTCCAA CCCCTCAGTG CTTGGAC AGGGGCCCTT 180
CTTAGCTATAGGGTATGGC CGGACCGGCC CTTCTGCCC AGCAGTTGC AAGCACTGG 240
CCAGGCCGGC CCTCCAGGNT GCTGCTGCGT GGGGGCCCGG GTGCCCCCAG GTCCATGCAG 300
ACTGGGGATT CGGTGGGGAG GGGCGCTTCT AAGGAACCAA ACTGACGCTC ACTCTGGGCT 360
TCCAAGCAC CCTTAGCACG GAGCCCACCC CTAGCTCGAG 400

```

## (2) INFORMATION FOR SEQ ID NO:524:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 388 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

```

GAATTCGGCC TTCATGGCCT ACCCACCCTG TAGTCAACCC CACTCGTACT GTAGCGAGAC 60
AAAAACATGC CATGTGTGAAG AAGGGTACAC TGAAGTCATG TCTTCTAACA GCACCCTTGA 120
GCAATGCACA CTTATCCCCG TGGTGGTATT ACCCACCATG GAGGACAAAA GAGGAGATGT 180
GAAAACCACT CGGGCTGTAC ATCCAACCCA ACCCTCCAGT AACCCAGCAG GACGGGGAAG 240
GACCTGGTTT CTACAGCCAT TTGGGCCAGA TGGGAGACTA AAGACCTGGG TTACCGTGT 300
AGCAGCTGGG GCATTTGTGT TACTCATCTT TATTGTCTCC ATGATTATC TAGCTTGCAA 360
AAAGCCAAG AAACCCCCCT GCCTCGAG 388

```

## (2) INFORMATION FOR SEQ ID NO:525:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 459 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCG TCGACCGAAC CGAGTTGTAC 60
ATTTTTTTTG TGATGGGTTA TTTTATTATT TAATTATTAT TGTGTTTTTG GTTTTTTTTT 120
GGTTGGTTTT NGATTTATGA CAATNCCACT CTGGCCCCA GTTGTCGTCC TGTCACCTCC 180
TCCCCTGTCC ATCACCCTGG CTCCCAGACC AGGCTCAGCA ACACATTGAG TCTTGGGTTC 240
CAGGAACCTT GCCAACCTCA ACCCTCCAGC CCGTGCTCCA CTGGCTATGG CTCAGACCAA 300
GGGCTCCTCC TCTCCNTCT TGGCCTATGG AACAGCCCGG GTGCTCCAAG GGGGCCAGGA 360
GGGCATGGCT TGGCTCCCAA GATAAGGGGT CCGGGGCCAG GACACCAGG CAAGGTGGCC 420
CCTCCCTGCC TAGCCCCCTT CCCCCACCC AAAGTCGAG 459

```

## (2) INFORMATION FOR SEQ ID NO:526:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

```

GAATTCGGCC TGGCCT ACAACCTGGA AAATTCTCTG ACTTAC TTAACAAAA 60
CCCTCCCCTT TCATTGAATC TCCATTGTCT GGAGTTTGCT TGTTTTAAIC TAGCCTGTTC 120
CTCCACTATG GGCTCCCTTT CAAACTATGC CCTGCTTCAA CTAACCCCTTA CTGCTTTTTT 180
GACAATTCTA GTACAACCTC AGCACCTGCT TGCTCCAGTT TTCCGGACAC TATCTATCTT 240
GACTAATCAG TCTAATTGCT GGTATGTGA ACATCTAGAT AATGCAGAAC AACCCGAACA 300
CCTCGAG 307

```

## (2) INFORMATION FOR SEQ ID NO:527:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```

GAATTCGGCC TTCATGGCCT ACCAATACTA AGCTTATTTT ATTGTAATAC AGTTATTGT 60
ACCACCTTAG AGCAATCTTT TGAAGAACAA GAAACACATA TTGAGCCACC ACGCCCAGCC 120
TTTTTTCAGT TTATTTTAA TCTTTTGCTG TTCATTGGCT CATTCTGTGT ATAAGCATGT 180
TAAATTAC CAAATATGAA AATAGCCTCC CCTTGGCCCT GAACTCCTCT ACAAGCAACT 240
ACCTCATGAT TTTATCTCTT TATCCTCAA TTCTTTGGAA TATAATTTAT ACTTGTTTCA 300
TCCCTACCAC CCTCGAG 317

```

## (2) INFORMATION FOR SEQ ID NO:528:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GAATTCGGCC TTCATGGCCT ACAGCAGTGT GCTTTCATCC AGTTTGCCAC ACGGCAGGCT 60
GCAGAAGTGG CTGTGAGAAG TCCTTTAATA AGTNGATTGT AAATGGCCGC AGACTGTATG 120
TGAAATGGGG AAGATCCCAG GCAGCCAGAG GAAAAGAAAA AGAGAAGGAT GGNACTACAG 180
ACTCTGGGAT CAAACTAGAA CCTGTTCCAG GATTGCCAGG AGCTCTTCCT CCTCCTCCTG 240
CAGCAGAAGA AGAAGCCTCT GCCAACTACT TCAACTTGCC CCCAAGTGGT CCTCCAGCTG 300
TGGTGAACAT TGATNTGCCA CCGCCCNCTG GCATTGCTNC ACCCCACCC CCAGNTTTTG 360
GGCCACACAT GTTNCACCCA ATGGGACCAC CCCCTNNNAC TCGAG 405

```

## (2) INFORMATION FOR SEQ ID NO:529:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCGGCC TTCATGGCCT AAGAAACCAA ATTAGCAGAC GGATAGAATA TAAAGCAAGA 60

```

```

GGCAATA TAGTGTATT AAGAACTTG CTAGACCCCA T ATTAC TCAGTCTACT 120
GTTGGTTG AGAATTACTT TAGGAAGAGT ACGTTTTTGC CTGGAATA CACTGGAAGT 180
GGTACCAAAC AAATCTAATA AAATGATGTT AAAGAGATT GCAGTAATT TTATCAACTT 240
TCAGTTTGCA AACTTTTATA AAGATATGAA CGGGACACTC GAG 283

```

## (2) INFORMATION FOR SEQ ID NO:530:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GAATTCGGCC TTCATGGCCT TTCTATAAAT GAGTTCCTTA TAAGAAGCTT GTATCATTCT 60
CACAAATTAA AAATAATAAT ATTTTAGCAA GCTATTTTTT AAATATAATT TAAGCCCACA 120
CTTCCACATT TGGGGTAAGT GATAATTTTT TCCTCTGAAA GACAACAAAT ACTAACACAG 180
GCCCAGACTT GGCTTTTGTG AGTCAATTAG TGATCCGAAG GTGAGTGGTA TTAAACGTA 240
TGATGAGGGT AAGATTGAT TTATTTTACA TATATATCTT CTGGTATCTG TGTGTGTGTG 300
TGTGTGGTGT GAAGCTCGAG 320

```

## (2) INFORMATION FOR SEQ ID NO:531:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```

GAATTCGGCT TCATGGCTTG GGGGTGACAG TTAATATATN CGGTCATTTT AGATTGCTTC 60
CACTAATATT GGTTTATCCA TATTATAAAA TATTTTAGTG AGTATAAAAT TGTCTGCATT 120
CATAAAGATG CATAAAATTA ACTACAGAAC CAGCTTGAGT AATGCTTTTC TCTCTTTTC 180
TTCTTGTCAA TCAGATATTA TCTTTATACA TTGTTTTAGA GTATACATCT ATCAAAATGC 240
AACATTGTTG AAGGATATGT AATTTATACA GCAAACGTGT AATGGATAAA AATGTGCAAA 300
AACAATCCTT AAAGTATTGT ATTTGAACNA AAACAATCTT AAACCACATA ATCTGAAAAA 360
AAGGGGTACA TATTTTACCA AATATACTAA TCCATACAAG ACTGCTTGAG AAAAAGAATA 420
TGCCACCTAC TCGAG 435

```

## (2) INFORMATION FOR SEQ ID NO:532:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```

GAATTCGGCC TTCATGGCCT AAGCCATCAG ATTGAAATTA ATTTAGACAG GAAGAATCTA 60
TATAAATTTG ATGCATAGCA AACTCTGACA TAATTTGGTT TATTTTGAAG TCTGGCATAT 120

```



```

TTTTCATCAC      ATTTT ACGGGTAAAT CATAATATAT CATAT      ATAAAAGTAT      180
TTTCTTAAAA      ATGTGCCATT TGCTTCACAG ATTTTAAATC TTCTAA      AAAAGAAGTA      240
AATATTGTTT TGCCAACACA GTCCATTGTT CCAAGAACTT TTGTGCTTAA ACCAGGAATG      300
GTTCTGTTTT TGGGTGCTAT AGGCCGCATA GCCCTCGAG      339

```

## (2) INFORMATION FOR SEQ ID NO:533:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GAATTCGGCC TTCATGGCCT AATGTGCTCC AGGAGGCGCT GGGGGATGGT GACCTCCCAA      60
GGCGGGCAGA NGACTTCTGC CGTCAGGGTC GCCTGCTGCT GAGCCTGGGG GATGAGGCGG      120
CGGCCGCAGG GTCTGGATCC CCTGTGCCGT CGCCTCTTCC TTTTTCGACG CCTCCGCCGC      180
CGCCTGAGGA GCGGAGCTAG CCGGGAGTTA CACCGCCACC GCCAGGATGG ATAGAATGAC      240
AGAAGATGCT CTCGCTTGA ATCTGTTGAA GCGGAGCTTG GACCCAGCAG ATGAGCGAGA      300
TGATGTCCTG GCAAAGCGAC TCAAATGGA GGGGCATGAG GCCATGGAAC GTCTGAAAAT      360
GTGGCATTG CTCNAAAGGA AGGANTTGGC AAATCTTGAG GTGCCACATG ANTTACCCAC      420
CNAACAGGAT GGCAGTGGTG TCAAGGGCCA TGAAGAAAAA CTTAACGGGA ACAACTCGAG      480

```

## (2) INFORMATION FOR SEQ ID NO:534:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GAATTCGGCC TTCATGGCCT ATATGTATTT TTAATCTATG ATGGTTTATG TGAATAGGAT      60
TTTCTCAGTT GTCAGCCTGG GCGACAGAGC GATACTCCAT CTAAAAA      GNAAAAA      120
GAGGTGACTA GGCCATGAAG GCTCTGTCCT CACAGATGGA TTAATGCCAT TGTTGTGGGA      180
GTGGTTTTCT CATTGAAGGA TGAGCTTGAG CTTGGCCCCC TTCCTTCTCC CGCCTCATT      240
CCCTCTATGT NGCCCCTATG ATGCCTAANG CCATGTTATG ATGTGGCAAA AAGGCCCTCG      300
CCAGATGCCA GCCCCTTGAC CNTGGAATTC CCAGCATCNA GAACTGTGGA CCNAATGNAT      360
GTTTTTTCCT TATAAANTAA CCNGCCACNG GTATTTTGTT AAAGCNGCAC CNAGCAGACT      420
CGAG      424

```

## (2) INFORMATION FOR SEQ ID NO:535:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GAATTCGCTTCATGGCCT ACGTTGACTT AATCAGAGGG T      TTTG CCAAAGCAAA      60
ACCTGAAATT CCATGGACAT CTCTGACTCG GAAGGGGCTT GTTCGAGTTG TATTTTTC      120
ATTGTTTCAGC AATTGGTGA TTCAGGTAC CTCTTAAGA ATCTTGTTT GGCTGTTACT      180
ACTTTATTTT ATGCAAGTTA TAGCAATTGT CTTATATTTG ATGATGCCTA TTGTGAACAT      240
AAGTGAAGTA CTGGACCCT TGTGCCTTAT GCTACTCATG GGAAGTGTCC ACTGTCNAAT      300
TGTGCTACT CAGATAACAA GACNTCAGG AAACCTCGAG      340

```

## (2) INFORMATION FOR SEQ ID NO:536:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGGCC TTCATGGCCT AGGCGCTCGC TGAGGCAAAA GGAGGCGCTC GGCCCGCGGC      60
CTGACAGGGA CTTAGCCCGC AGAGATCGAC CCCGCGCGCG TGACCCACACA CCCACCCACT      120
CATCCATCTA TCCAATCCCT GCGCCGCTC CTCCCACCT GAGCAGAGCC GCCGAGGATG      180
ATAAACACCC AGGACAGTAT TTTGCCTTTG AGTAACTGTC CCCAGCTCCA GTGCTGCAGG      240
CACATTGTTC CAGGGCCTCT GTGGTGCTCC TGATGCCCCC CACCCACTGT CGAAGATCCC      300
CGGTGGGCGA GGGGGCGGCA GGGATCCTTC TCTCTCAGCT CTAATATATA AGGACGAGAA      360
GCTCACTGTG ACCCAGGACC TCCCTGTGAA TGATGGAAAA CCTCACATCG TCCAATTCCA      420
GTATGAGGTC ACCGAGGTA CTCGAG      446

```

## (2) INFORMATION FOR SEQ ID NO:537:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```

GGCAAATTAC ATCACCAAAT CAGCATATTC TCCAATGGAA AGGAGAGGCC CACATAGCCA      60
AATTATAATC TGCAGGTTTC TGAGCCAGTG TTAAATCTGA ACAGAGAAAA GATTTTTTTT      120
TCAATTGGCA AATTTTAATG ACATCACTCA TTGATACCCC AAAATCTCCA GTTCTTACCA      180
AGCTTGGCCT TGCCAGTGG TTCCTCTGTT CCCTCAACAA TGTTTCATGG NATCTAACAA      240
CTTCCCTACC CACTAACCTT CTCAGCTTTC ATGGTGAACC AAGCCTCCTC TGTCGCACTA      300
ACCTTCCCAG CTTTCATGGT GAACCAAGCC TCCTCTGTCC CGCTATTCTC GAG      353

```

## (2) INFORMATION FOR SEQ ID NO:538:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GAATTCGGCC	GGCCT AAGAAGGAGN AGCAAGCGGA	TTTCA	GTGTTCTTC	60
AGAAAAAAT	GGTTATTTCT TTGAATCAT GCCTGAGCTT	TATTGTTTA	TTGTTATGCC	120
ACTGGATTGG	GACAGCATCA CCTCTGAATC TTGAAGACCC	TAATGTGTGT	AGCCACTGGG	180
AAAGCTACTC	AGTGACTGTG CAAGAGTCAT ACCCACAATCC	CTTACTCGAG		230

## (2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GNGAACCAGA	GATCCCCATA GATGGAACAG AATTATCCCA	CTACCGTCAG	CGTGCCCTCC	60
TGCAATCACA	GCCAGTTGCG CGGACGCCTC TCCTCCACAA	TTCTCTGCAC	ATGCTGTCTT	120
CCCGCTCTTC	TGGCATCCAG GTGGGAGAGC AAAGCACAGT	GCAAGATTCT	GNTACCCCTT	180
CACCCCCACC	GCCTCCCCCT CAGCCCTCCA CGGAGCGCCC	CAGGACTTCC	GCTTACATCA	240
GGCTCCGACA	GCGGGTCAGT TACCCACAG CTGAGTGCTG	CCAGCACCTT	GGGATCCTGT	300
GCCTTTGCAG	CCGCTGCTCT GGCACCTCGAG			330

## (2) INFORMATION FOR SEQ ID NO:540:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 420 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GAATTCGGCC	TTCATGGCCT ACTCCGACTT TCGTCTTGA	TTAATGAAAA	CATTCTTGGC	60
AAATGCTTTC	GCTCTGGTCC GTCTTGCGCC GGTCCAAGAA	TTTCACTTAG	TTACCCTCTA	120
GAATTATTGC	ATTGGGGCCA GGTGGTGTCT AGTACAGTTT	TTTACTTTGG	AGAATTTATT	180
GAAATTTTCT	TTGGCTGAGA ATGCCTTCAG TGTGTTGGT	TATTCCTTGG	ATACTTGCAA	240
ATCGATTGTA	TTTTCTCTGG GACACGGGGT TTCAGATAGA	TCAGTTAAAT	GAAGCTTGAT	300
TATATCGTAT	TTCACGTCGC ATGCCATGTG TCTTGTCTGT	TGGACTGTCA	GGTCTCAAGA	360
GACGGGCTTG	GGTTTCCCTG TGTGGCTGCT GCCTTGCCCC	TTCCCCGATC	CACACTCGAG	420

## (2) INFORMATION FOR SEQ ID NO:541:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GTGGGCAAAG	AAATGAAGTA CATTAAGGAG GCCTTTTTTT	TCCTCCAATG	GCTGTTAGAT	60
TGTGTATTGC	AACCAGGAGT TGTCAGCTC CTGATCCTAA	TCCAAGCTGG	GGACTGTGGT	120
ACAGTGTGGC	CAGCTGCCTT GCCAGCTGCC TTACCAGGCA	GGTCTCGCAT	CTGCCATTGT	180

```

CATCCCA  AATCAAGTT GCAAGCCAGT GAACTTGCTG G      GCCC AGGTCAGAAC      240
AGTTACAGCT TAAAAGCCTT TGCTGCCCTT TTTCAGATCC TGTTCCCTGGG AGAGTCTCCC      300
ACACTAAGTT CAGTGTGGGT ACCAGCTGTG GTGAGGGTGT GCTGCCACTG CAGCTGCTGT      360
CTGGGCATCT GTGTTAGGGC CAATACTTCA AGAAGTGTGA GTCATTGTGA AGTGACTGTA      420
GGCAGCTGGG AAATAACAGC TGTGAACAGA GAACAACTCG AG      462

```

## (2) INFORMATION FOR SEQ ID NO:542:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

```

GAATTCGGCC TTCATGGCCT ATGGGAGATA GGGGACTTAA TTATTTTG TG GTTTTTTCT      60
TTTTTAGGTC TTAGGAAGGT CTTGTTCCA TAGGTATCTG TATAATACAA TTTTATTAGG      120
TGTAATAGAG ACAGTTTTGT GGAACAGAA TGCTGACACT GATTAAAATT AAGGTGTATA      180
TATGTTTAGT CTTTGAGATG ATCTGTATGC TACATGTAGG TGTACATTGT AATTTTCTGG      240
CTTGTAATTT TTTGTATCAT ACTCTGTTTC GGAATTTC AAATGCCTAT GACCAGCCTA      300
TGACATCTGA ACCATACCAA CTGACCTTAG AAACAACGAC ACTCGAG      347

```

## (2) INFORMATION FOR SEQ ID NO:543:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GAATTCGGCC GCCTAGCAAA AGTGAAAAA TAAATAAAAC AAGCCACAGA TTGGGACAAA      60
ATATTTGTGA AGGATATATC TGATTAAGAA GTTATATCCA GAATATATGA AGAAGTTTCA      120
AAACTAAAGA AAACAATTCA TTTTTTAAT TGGGCAAAG ATTTAAACAA ATATTTTACT      180
AAAGAAGATA TCCAGATAGC AAATAAACAC ATGATATTCA CCGAAATTAT TAATTAGGAA      240
AATGCAAATT AAGATGAATA TCATTATATA CTTACTAGAA TGGCTATATT TTAAAGTTT      300
GACACTGCCA ATTACTGTA AAGATGCAA TCAGCGGAAG CTCGAG      346

```

## (2) INFORMATION FOR SEQ ID NO:544:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GAATTCGGCC TTCATGGCCT ACTTCTTCC TACATTAGTG GCATACTCTG AATGACCTAG      60
TGAACAGACT GAGAAGAGGC CTCTGAATTG CAGAGTCTCG TCTGTAGGAG AAGGTTTCAGG      120
AGAGTATTGA ATTTTAGGGA CTAGAATCCA TCTTACCTAT GCTGTTGCAA TCGCATGCTG      180

```

ACTGGAAGTG	AAAGAG	ACTTACAAGT	AAGGACATGG	GTTTG	TTTTTTGTTT	240
TTTGTGACAG	AGTGAGACCC	TGTCTCGNAA	AAGGAAAAAA	AGTAATAGAA	CATTAAATAC	300
AGTATCACAC	CATTTATGGT	TAAAAAAGNA	AAAAGACAAG	ACACTATATG	AAGTGAGTGT	360
CTTTTAAAGT	TAAAAAATT	AAATGAAAAC	AAACTCGAG			399

## (2) INFORMATION FOR SEQ ID NO:545:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC	GCCTCCATCT	CCCTGGCCAT	GTTCTTCTTG	AAGACCCTGA	CAGTGGCTTC	60
TTCTTTGTGG	CAGCTGGCCA	ACAGCCAGAC	CCTGACAGCC	AGCCCCAAG	CACCTGGGTC	120
CCCAGAGGAT	TCTGAGGGTG	TCCCCCTCAT	CAGCCTGCCC	CGCGTGCCAC	AGGGAGGGAG	180
TCAGCCTGGG	CCCAGCCGGG	GATTAAAGTCT	CATGTCCAGT	CAGGGCAGTG	TGGACTCAGA	240
CCACCTAGGT	TATGATGGTG	GCAGCAGTGG	CTCAGACAGT	GAGGGTCCCA	ATGACACCCT	300
TGGTGAGAAG	GCCCCCTTCA	CATTGCGGAC	TCCACCTGGG	CCAGCACCTC	CACAGACTTC	360
ACTCGAG						367

## (2) INFORMATION FOR SEQ ID NO:546:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

GAATTCGGCC	AAAGAGGCT	AACCGCGGNC	GCTCTACAAC	TAGTGGATCC	CCCGGGCTGC	60
AGGAATTCCA	TATCAAGCTT	AATTAAGAAT	TCGGCCAAAG	AGGCCTAAGC	GAGAAGAGTC	120
CCCGCTCCGT	GCCCTACCAC	TACTTTGAGA	AGGGCCGGCT	AGATGAGTGT	CAGATGTACC	180
GTTTGATGA	GCAGGCTCCA	AGGAGCGCCC	ATCGCTTCAT	TACCGAGAAC	CCTGTGTTCT	240
CCCGCTGGGC	CAAGAAGCGA	CCCATCGTGT	TCGCCCACCC	GTCTGGGAGG	GCCAAGTAGT	300
TCCTGTTGCC	AGTGACTGCC	AGGCCTCAGC	CAGGCCTGTG	ACCCATTCCA	GGCCAACACG	360
GCTCTAATGT	GAGCATTAT	GACTCACCTT	CTACCTGACA	CCAGGTAGAA	CATGAAGTCT	420
CTATTACCCA	ACACTGGGTA	CACTCGGAGG	TCGAG			455

## (2) INFORMATION FOR SEQ ID NO:547:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 401 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

GAATTCGGCC	TTCATGGCCT	AGTCATTTTG	TCAGCTTCA	CACAAGAATC	TTTGATCCTA	60
------------	------------	------------	-----------	------------	------------	----

```

TTGTAATAA AATAAGGAA GTTCTTCTCT TGCTCAAAGA A CTAC CTCCTTAACT 120
CCAGTAAAAA GGACTTCATC AGCACTTTTC ACCACACTTT TGAAGAAGCC ACCAAACATT 180
TCTTTAGTAT TTTCCGCCT AACACTTAGA TCCTGATCAT ATTCCAGGAA AACATGAAAG 240
TTGCGATCTT TACTGAGAAC AGGGTGAGAA GAAAGCCGCT GAAGAAAGAC TTCATGGGAG 300
GACACAGTCT TCTTAAACAC AGCGAGATAC TCAGCTTCCA GTTCTTGTTT CATCTGGGCT 360
TATTATTCCA CCTTCTCCCA GTTCTGTCAT CTTCTCTCGA G 401

```

## (2) INFORMATION FOR SEQ ID NO:548:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GAATTCGGCC TTCATGGCCT ACAAGCCCCT CTTACCTCTC TGGATGCTTT CTTTAACACT 60
AACTCACCAC TGTGCTTCCC TGCAGACACC CAGAGCTCAG GACTGGGCAA GGCCAGGGA 120
TTCTCAGCCC TTCCCCAGCT GGGAGGAGCT TGCCTGCCTG GCCACAGACA GTGTATCTTC 180
TAATTGGCTA AGTGGGCTTT GCCCAGAGTC CAGCTGTGTG GCTTTTATCA TGCATGACAA 240
ACCCCTGGCT TTCTGCCAG ATGGTAGGAC ATGGACCTTG ACCTGGGAAA GCCATTACTC 300
TTGTGTCTGC TACTGCCCTC CCACAGTCAC CCAATATTA CAAGCACTGC CCCATTGGCT 360
CGAG 364

```

## (2) INFORMATION FOR SEQ ID NO:549:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 195 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```

GAATTCGGCC AAAGAGGCCT ATGCTTTTCT TTGCAGCACT TAGCACAAAT AGTAATTTT 60
ATTTTACTTT TATAGATGTA TTTTATGTCC CTCCACCAGA CTGTATACTC CATGAGGACA 120
AGGATATTGA TGTTTATGTT AACTCTTGTA CACTCAGTGC CTGGCACCAT GCCTGACCCA 180
GAAGAGGGAC TCGAG 195

```

## (2) INFORMATION FOR SEQ ID NO:550:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```

GAATTCGGCC AAAGAGGCCT AACATAATGC GCTAGCAGAC TTGGGAATTA GGGGCAGAAT 60
GCTGCTCTAA ATTCAGGAAA TCATGGCAGC GTTTCATATT GAACATGGTC TATTCCTACC 120
ACTAGCGCTT TCCTGGCTGA TTTCTTCTCC AGCTGGAGAC TTCTTCTG TTTTCCAATT 180

```

TATGCTCCAC CCCCCCA ACCCACCACAT AAACCAGTGG CTGCCC CAGTATCTTT 240  
 CATAGTGGTG AGTTCTGGAT TTTCAGCAGT AATGGCCGAG AGTCAGGGAC CAGATGAGTG 300  
 TGTGTGAGCT GGTGAGAAAA GGTAGATTCC CTCGA 335

## (2) INFORMATION FOR SEQ ID NO:551:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 662 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

GCCAAACATG TCTCACCNA A NNCCAAATGT CCCNCGGGG AGCAAAATCT CCCCTGGACA 60  
 ACTGTGGAAT CACTGTMNGG AAGTGTTTAC TTGAGTGGTT TNCTGGCCTG GGCCTCATAC 120  
 TCTGAATTTT TGAAGTAAAT GGTCTGGGGG TGCTGGGGCT GGAGAGCAGA GCACTGGTAT 180  
 TTTTAGGAGA TCCCCCTGTC ATTCTAAAGC ATATCCAGGG TTAAGCACCA TTAATCTGAN 240  
 GATCTNCNGT CTGATCTGCG GGGCCCTTTT CATCTANGTG CAGTATTTTT CTCTATGCTT 300  
 TTTAAATAA TGAAAGTTTC TNGAACTCCA TCTGGACTTG AAATATAGCC TGCCACACAG 360  
 TTAGCAAATA TAGCAAGAAT AACAAGTGTT CTAATGGAT TTTTAATTTA TTATGGCAAT 420  
 AGTACATTCC AANAGGGTGG CATTTTTTAA AATGAGATT TTCTTTTGGG CCTAAGATTA 480  
 CAGTCACATG GTTCCAAATT CAGAGGGTTC AAAAGGACAC AGAAAAGCCT GCTTCCCACT 540  
 TGNGCCCACT GGCCTCCCCT TTTTTCGCAT AAATGGCAGT ATATAGCTTT GTCTGTTTCT 600  
 TGTNNNGA GCTTAATACC TTAGAGACAG ATTTNGTAT ATCTGTACCT ACAGAACTCG 660  
 AG 662

## (2) INFORMATION FOR SEQ ID NO:552:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 306 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GCTGTTTAA AAGAGTTGGG GGAAGAGGTA GAAATGAATC TTTTGGTTA GTTTTTTAAT 60  
 TCTCTAAGGA CAACATTGGG GAAGTGAGCT TTAGAGTTAT ATTTGCAGTA TTTATTTTAA 120  
 TCATGAAATA TTCAAGTCTA GGCCTTGGT GAATTGAGGC CTGGTGAGTA TTTCTGCTTT 180  
 CCCCCTGGAG AGATTGAGAT GGTTCCTGAT TGGGAGCTTT AATTCTGTGG GCATTGTGG 240  
 GACTTACCAA AGAGGTATCT AGAGTTCCTT TAAACCCCC GGCCTGTCCC TGCCACAAA 300  
 CTCGAG 306

## (2) INFORMATION FOR SEQ ID NO:553:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 290 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

```

GTCAAAA GAGCTAGGAC CAGATCTCTA AGTCTTACNG GTCAA AAAACAAGTA 60
CTTTCCTATC TGGTTATACA GAAATCTGGA AACAGTCACT CCCAGCCTCA CAATTAATAA 120
AACTTGGACA TACAGAAAGT TCATAGTTTT CCTTGAAGTC ATGATAGTGC TGAGATTTC 180
CGGCAACCAA CTGGCCCAGA TACTCCAGAG TCAAAGACAC TGTAAGGAGA GTTGACATNT 240
GAGCATTAGA CAAGACACAG ATGGTANGAG TTAAGCTAGG GTTACTCGAG 290

```

## (2) INFORMATION FOR SEQ ID NO:554:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```

GAATTCGGCC TTCATGGCCT ACTCTATGGG GATGAGGTAG AGGAGAGCAA GATATTTCCG 60
CAGCAGGGAA AAGGGTAGAA CAGAATAGGG TGACACAATT TACACTTGAT ACTGCATTAA 120
CATCTGGTAG AGTGTCTAGG GCAAAGGTTA GCCAAAATAT AGCTGGATGG TTGAGGGGATT 180
TAGAAGGAGT TGGGATGAAT CCATAGTCTC AATGAATGGA GAAAAAGTAA CTCAGGAAAG 240
TAAATGCTGG TGAATTATCA GCGGGTGGCT GGTGATGTTT GGTTTGGATT GTGAAAGCTG 300
CTTAGACCAA GATGGGCTGA GGAAGGGGA GGAGAGTGAG CATGTAGAGG TTGAGGCACT 360
TGGTCTCGAG 370

```

## (2) INFORMATION FOR SEQ ID NO:555:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC AAAGAGGCCT AATTGCCAAT CAACAACCTT TCCTAATCCA CCTTGATCCT 60
CAATCATAAT ACTCAAAAAC TGCCAAAAC AAAATCTTCC TGACAAAAT ACAGGCCCAA 120
CTTCCTCATC TGCTTTCCAG GTCTTCTGTA ATCTTATCCC AGCTTATTTA CAGTCCTCCA 180
TTTACTAAGA AAACCCAAA TAATCTTTTC CTGCCCCAAA TTCATGTTCT TCCCTTTCTT 240
TTTGTTTATA CTACCATACA TATCTAGAAA TGATACTCAA ATATTCATCC TCAGCACCTT 300
CGAG 304

```

## (2) INFORMATION FOR SEQ ID NO:556:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGGGGAAA GCATATCACT AGGACTGTGA CCCCTGTGCC 60
TACCATCTT ACTCTCTACC TCTTAGGAAA GTTTCAGTGT GTTACTTGG GACTTCTGGA 120

```



CTAGCTGCCG	CAACAG	TGGACTTACC	AGTTTGCCAC	TACTC	CCTTTCTACT	180
GGTGCACACA	CCTTAGTAAG	GCAGTTTGAT	TACTAAATGC	AGCTGTCTCC	AGAAATGGAA	240
TGATGCTATA	GGCCACTTAC	TAAATGAATG	ATCAGGAGTC	TCGAG		285

## (2) INFORMATION FOR SEQ ID NO:557:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

GAATTCGGCC	TTCATGGCCT	AGCTGGATCT	GGCCACTGTG	CACTCCATCA	TCAGCAAAAT	60
GATCATTAAT	GAGGAGCTGA	TGGCCTCCCT	GGACCAGCCA	ACACAGACAG	TGGTGATGCA	120
CCGCACTGAG	CCCACTGCCC	AGCAGAACCT	GGCTCTGCAG	CTGGCCGAGA	AGCTGGGCAG	180
CCTGGTGGAG	AACAACGAAC	GGGTGTTTGA	CCACAAGCAG	GGCACCTACG	GGGGCTACTT	240
CCGAGACCAG	AAGGACGGCT	ACCGCAAAAA	CGAGGGCTAC	ATCGCCCGCG	GTGGCTACCG	300
CCAGCAGCAG	TCTCAGACGG	CCTACTGAGC	TCTCCACTCT	GTTTCCCGCC	TGGGCCATCC	360
AACCTTGAAG	TCCTAAACCA	CACCTCAGTC	ACTAAAGGTC	TGTCTCGAG		409

## (2) INFORMATION FOR SEQ ID NO:558:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

GAATTCGGCC	TTCATGGCCT	AGGAAAAAGA	GATATAAAAA	AAAGAAAAAG	AGNGGTACC	60
AGCCAACAGG	AAGACCACGG	GGAAGACCAG	AAGGAAGGAG	AAATCCTATA	TACTCACTAA	120
TAGATAAGAA	GAAACAATTT	AGAAGCAGAG	GATCTGGCTT	CCCATTTTTA	GAATCAGAGA	180
ATGAAAAAAA	CGCACCTTGG	AGAAAAATTT	TAACGTTTGA	GCAAGCTGTT	GCAAGAGGAT	240
TTTTTAACTA	TATTGAAAAA	CTGAAGTATG	AACACCACCG	TCTCGAG		287

## (2) INFORMATION FOR SEQ ID NO:559:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

GAATTCGGCC	TTCATGGCCT	ACTTCTCAA	AATAGATGTA	CTTGACTACT	CTTTTCTTGA	60
TTCTTCTGGG	AGTAACCATC	TCTTTGGAGA	TGGTTGTTAG	TAAGGTTATA	AAAATAACCT	120
TACTGAGGAA	CTCCCATGCA	ATCCTCTGAA	AATAATAAAA	ATTTCCTTAT	TTCAAGAACT	180
CTTATTTAAC	AAAGTAATTG	TTAGGGTTGA	ATACTCTAGG	GGCAAATGAT	TTATTGTGCC	240
TTTTGTAAAA	GTCAACACTT	GGCAGGTGTG	TGTTTGACAC	TGGCTGATGC	TGGGCTTATT	300

TCTCTAAATATGGTAATT CTAGTAAAGT AAAGAAAATT G CAGA TATTAGGAAC 360  
 TGTACATAA CCCCCTCGAG 380

## (2) INFORMATION FOR SEQ ID NO:560:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GAATTCGGCC TTCATGGCCT AAAATTGTTC ACGAGGGATT ACGTGGTTTA CTTGTCTGTT 60  
 GTCCAGATAG CTTTATATTC TTTAAGATTC AGCTCGGATT CTTATCCTAT TTTTGCCATT 120  
 AACTTTCATT ATGATTTTGG CAAAGCCATT TTGTTTGCTT ACATTTTTC A CTTTAAATGT 180  
 GGTGTCTGGC CTCCCCCCA CACTCGAG 208

## (2) INFORMATION FOR SEQ ID NO:561:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 505 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GAATTCGGCC TTCATGGCCT ACAAACANTT TTTACTGNCT TATAAATAAA AACAGCGACA 60  
 CATCCTAAAT GTGCACCTGT GCCGTGGCTG AGCCGCTGCA GTGAGGGCTA GTGTGCAACA 120  
 CCGATGCTGT GCTGGACGCG TGCCAGCCG GGTCCCCTGA CAGGAGGCAN CCGGGGCCGG 180  
 TGCCTGTGTT TGCATGTTGC AGTCATGGGG CGGGGNCGGC AGANGCCTGT GTGATNGTNG 240  
 CGTCCCTGGA AAAAGAAGNN GGGNAGGCCC CTCNCACNTG TANCCAGCC TGCAGANGGG 300  
 GNGTTNTGTG GGTCCCTCCC CGTGCATATG CGTGTGATNT CACCCATCCC GTGTGGGTGC 360  
 GCAGGAGGGG CCGAGGGAGG AGGGTGCTGG AGGGCGGAAG TTACCTCTGA CTGGAGGAGA 420  
 NACCCGGCCC GTGTNACCAG CANAGGTGTG NTCGTTCTAA AACTGGGAAA AATTGTGTTCT 480  
 TAATTTTAAC CACAGTCCCC TCGAG 505

## (2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GAATTCGGCC TTCATTTAAA AGATAAGTTA GAAAAGTCAA AGCGAGAACG GCATAACGAG 60  
 ATGGAGGAGG CAGTAGGTAC AATAAAAGAT AAATACGAAC GAGAAAGAGC GATGCTGTTT 120  
 GATGAAAACA AGAAGCTAAC TGCTGAAAAT GAAAAGCTCT GTTCCTTTGT GGATAAACTC 180  
 ACAGCTCAAA ATAGACAGCT GGAGGATGAG CTGCAGGATC TGGCAGCCAA GAAGGAGTCA 240  
 GTGGCCCACT GGGAAGCTCA GATTGCGGAA ATCATTCACT GGTCAGTGA CGAGAAAGAT 300

GCCCCGGGGTT CAAGC TCTTGCTTCC NAGATGACCG AAGAG

G

351

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

GAATTCGGCC TTCATGGCCT ACAAACCTGT CCATGGCATG AAAGACTTGG ACCGCCATCT	60
CAGAATCCAC ACGGGAGACA AACCGCACAA GTGTGAGTTC TGTGACAAGT GCTTCAGCCG	120
GAAGGACAAC CTGACCATGC ACATGCGGTG CCACACCAGT GTGAAGCCAC ACAAGTGTC	180
CCTGTGTGAC TACGCTGCCG TGGACAGCAG TAGCCTCAAG AAGCACCTGC GGATCCACTC	240
TGATGAGCGG CCGTACAAAT GCCAGCTCTG CCCCTATGCC AGCCGCAACT CCAGCCAGCT	300
CACCGTCCAC CTGCGATCTC ACACGGGTGA GTCCCTGACC AGGGGTCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

GAATTCGGCC TTCATGGCCT ATAGAATTCC TAGACTTTAC AGACTAATAG TTTGACATCT	60
ATCTCTGGCA AAATTCGAAA CTAAACATT AAACAAGGGA AAATGAGGGG TGGAGGNAAA	120
GACTGCGGAT TTCTAGGAAC TAACAATTTG CTAAGNATCA TTCATTTTTA AACTAATGTT	180
ATTTACTTTT GTGGTAGATC AGGGNATATG CAAGATCTTT ACTTTTCAGC AAGACATTTT	240
TCTCATAATG TCCTTATGGA GAAGACTGCT CTATGGACTA GNATAGTTTG ATAAGAAAGG	300
GCTGAGTCCA GCGNATTCAT TAGTTCAAGC AAAATCTACT GGAGGCCAAC TAGATTCCA	360
GCCATTATCG TACTTGGCAC TTTCNATACT TTGAATTTTA ACCACCACAC CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

GAATTCGCCC TTCATGGCCT AAGACGGGT TTCACCATGT TAGCCAGGAT GGTCTCGATC.	60
TCCTGACCTC GTGATCTCC CGCCTCAGCC TTCCGAAGTG CTGGGATTAC AGGCGTGAAC	120
CACCACGCCC AGCCATATAT CAGGAAGTTG AGCATCCATG GAGTTTGGTG TCCAGGGAG	180
GTCCTGGAAC CAATCCGCCA TGGATACTGA GGGATGACTA TAATATGAAC CTTGTATGTA	240
TGTAATTTAC CATTTTCTAG TTAGCCACAT TAAAAAGGA AAAAGAAACA GGTGAAAAAT	300
ATTTAAAAA TACGTTAACA CAATATATCC AGAACATGAT TTCACATTGA AATCAATATA	360

AAAATTAA AAATAGTTTA CAGTCTGGTG TGCATTTTAG AAGCA TATCCCTTTG 420  
GGCATGGTGG CCCATGCCTG TAGTCCTAGC CACTGAAGGC TCGAG 465

## (2) INFORMATION FOR SEQ ID NO:566:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 357 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GAATTCGGCC TTCATGGCCT ACAGCGAGAA GGAGTGTATG AGTGTGAGTG TGTGTGCATG 60  
 GAAGTTGGGC ACTGGGCGTC TGANTCCTTC CCCACCCAAG AGAGGAAGGA CCCCTCACCA 120  
 CCCCCACTGG CGAGACAGTT TACTTTGCCG ACTTGCCATG TTTTGGCCAA AACCAAGATT 180  
 TTGAAGGAAA TGAGTGGCCA GCGCCAGGCG CCAGGCCATG TGGCCTGCCC AGCCTCAATG 240  
 TNACTTGGTG GCGGGGTGGG GTGGGGGTGG GCAGCAGCAT CCCAGCCTTG AGATGCTTCA 300  
 CTTTCCTTCT CTGTAACCAG ACTTTGAAAA ATTGTTCTGT TCATCAGGCA TCTCGAG 357

## (2) INFORMATION FOR SEQ ID NO:567:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GAATTCGGCC TTCATGGCCT ATCTGCACTG AATTAGAACA AAATTAGGA GACTTCTAAT 60  
 TTGAAGCCAG AGGTGCTGAC TTTTGAGTCT TTGGAGATTG CCTGTGGAA ATATTCTGT 120  
 TGAGGGCCAA TGTCCAATG GGCTCTGAAG ATGAGAAGGA TCCCTGCCCT ATGTGGATGC 180  
 CACTGGATCT GGAATCATTT CTGTGGCTCA GATTCTGTA CACATTCTGC CAGGACAGGA 240  
 GCAGCCGTAT TGGGAAAAGA AGGGGGACAA TAACTAGAAA CGAACTAAGA TGTGGCCCTT 300  
 GCTTTTGTAC TTTTAATTTA ATGGGAAACA CTCGAG 336

## (2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 481 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GAATTCGGCC TTCATGGNCT ACCTGGACCT TGGGTGGCAG GCCTGGGGCC TTCAGTCCTT 60  
 AATTACAGGAG GTAGCCAGTC GCTGGAACTA AGANTGAACT TCAGCTGTTG TTGCCATAGC 120  
 TGGAGGGAAG AGGGAAAGGA GCGCTGCAGG GGAGCAGAGA CCTCACCCCTT CCTCTGCCGA 180  
 CATCAGGCTG CCGGTGCTGG ACGGGGCCCT GGCAACCGTG GCAGGAGTGG TGATGTCCGA 240  
 TGATGGTAAC AAGGGCTTCC TGAGGACCCC GAGCTGTCTT AAGGGCTCTT TACCTGGAGT 300  
 AAGTATCCCC TTTAATCCTC CCAACAACAC TGTGAAATTG ATTCTGTTGT TATTCCCATT 360

```

TCACCGATGA C C C C C A G G C C A G A G A T G T T A A G T A A C C T G C C C C T C C C C T C T G A 420
GCATGGCAGA G G G A G G G T C C G A A T G C G G A A A G T C T G G C T T C A G T G C C C C C A T C C T C T C G A 480
G 481

```

## (2) INFORMATION FOR SEQ ID NO:569:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

```

GAATTCGGCC TTCATGGCCT ACTCATCATT TGGAAAATAC TTGATGGCAG GAGAACTTGC 60
TTAAACTAA AGGTGGAGAA AGAGTTAACT TCCAGGACAA CCCATTATAG CTCACCTCTT 120
ACCAACAAAG CAGTTTTTAT ACAGCACCTT AGGACTCATT TCTAATGTCA ACCCAGATGG 180
CCAGTAAAGG CAAGGGAAGA GGCTAAGTGA CTCACAAAAA TCTCTGATAT TGAGGTCTAA 240
TGTGAAGGCT ATAGATAGGA ATTCCCCACA AACTTCTAAT GAGGACTAAT ATGAACAGCA 300
AATTGGAGAA GACACCAAGG ACCTAATTTT AGTTTCACTA GCCGTGGGAC CTTAGAAAAA 360
AGACCATTG CTCTGGACTT TTGTTTCCCA AGCCATAAAA TGTGGAAGAA TCTTCACAAT 420
TTCAAGTTGG TCATGTATAT TTCCCTTTTA CAGAGAAAGC TGAAGCCTCG AG 472

```

## (2) INFORMATION FOR SEQ ID NO:570:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

```

GAATTCGGCC TTCATGGCCT AGAAAGGATC AAGCTGATCA GAAGCGGGAG CTGCATTGAG 60
GGAAAAATAT GGCCAGAGAA GGCCTCACTG AGGAGGTGAC GTTGGTGATG CTGGAGCTCA 120
GATCTGAAGG GGAAGAAGGA AGCAGCCACA TATAGAAGTG AGGGAGGGGG CTTAGGCAAA 180
AGGAACAGCA AGCGGAGAGG CCCTGAGAAA GGAAAGGCTT GGCTCGCTCA CCTGCAAGGG 240
CCCCCTGGCT TGACATAGTG AGAAAGGTGT GAAGATGAAT TTGGAGAAAG GCAGGGACAG 300
ACCACAGGAG ACCTTAGATT TGATTCTGAG GCGGATGGGA TCCCTTGAGA GGATGCTGAG 360
CAGGGGAGAG ATGTGATCTC CTTTTCATT TAACATGATC GCTGCAGCTG CTGCTGGAGA 420
ATGGTTGCAG GAGCGAGAGT AGAGACTGGG AAGGTCTGTG CATCCTCTAA GCNACAGGCG 480
TCTCGAG 487

```

## (2) INFORMATION FOR SEQ ID NO:571:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```

GAATTCGGTTCATGGCCT AGAATAAATT GTGATACAAA AAAAAAAGAGT      60
GTACACTAAT AATGGGTTGG TCGTTTCTT CCTGGCTTTT TTTCTTTTA TTCAGAGTTA    120
GGAAATACTT TTATTTTTTA AAGGAAAATT CATCATAAAT TTGCGCTGGT ACTTTTGGAC    180
ACAGGATTCTT TTCAGTGAAG CTTTGCCGGC CGGAAATCTC CATGGCCGGC CTTGCCTCTG    240
CCCGGTCTTC ACTGAAGCCT GCTGGGCTCT CTCCACCTAC TTGGTCCATC AGTCTGTGCT    300
TGGCTCATCC TAGCAACCTG GATCCCGCAC CCGCTATGGC ACCGTGCTTG GCTGGAGGCT    360
GGTCCGAGCG TCCGTGACTA GCTTCCACCT TCGGCGCCAG CTTTGGACA AGGGGAACGC    420
AGTGGCACCC AAAAATCGG AGACATGAGA CTCGAG      456

```

## (2) INFORMATION FOR SEQ ID NO:572:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

```

GAATTCTAGA CCTGCCTCGA GATGCCCCGAC TACTACAAAC CTCAGTACCT GCTGGACTTT      60
GAAGACCGCC TTCCAGCTC GGTCCACGGC TCAGACAGTC TGTCCCTCAA CTCTTCAAC      120
TCCGTACCT CCACCAACT GGAGTGGGAT GACAGTGCGA TTGCCCATC TAGTGAGGAT      180
GGAGACCTCA CAGACACGGT CAGTGGTCCC CGTCCACAG CCTCCGACCT GACCAGCAGC      240
AAGGCCTCCA CCAGGAGCCC CACCCAGCGC CAGAACCCTT TCAACGAGGA GCCGGCAGAG      300
ACTGTGTCCT CCTCTGACAC CACCCCGTG CACACCACCT CTCAGGAGAA GGAGGAGGCC      360
CAGGCCCTGG ACCCGCCGGA TGCCTGCACG GAGCTCGAG      399

```

## (2) INFORMATION FOR SEQ ID NO:573:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

```

GAATTCGGCC TTCATGGCCT AGATTGGGT TAGTGGTTT CTTTTCAGCAT GTTGAAAATG      60
TCACCAACT GTTCTTGGG TTCCTTGA AAGCCAGCTG TCTGTCTGTC TGGTTGTCAT      120
GTCTGAAGT GATGTGCTT TACCTCTGGC TGCTTTAAGT ATCTTTGCC TTTTCCCT      180
TTGTGAATGT TTTGCTGAA GTGTAACATA TACACAAAG AGTGTGCAA TCATCAATGC      240
TTGATGGATT CTCGAG      256

```

## (2) INFORMATION FOR SEQ ID NO:574:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

```

GAATTCGGCT TGGCCTA GAATCATGCA TTTCTTTTC TTTT TCCCGTTGGC 60
TTGTCTATG CTGGTGGCAT CCAGGGCATT GCTTTGTCTC CCTGATTATG CCCAGGATTC 120
AAGGCTTCT TATTGTGGG GAGGCAGGCT GCCCACTGGG ACGGTTTTTA GTGTGTTTNC 180
CATTCTGGC TCCCTCGAG 199

```

## (2) INFORMATION FOR SEQ ID NO:575:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```

GAATTCGGCC TTCATGJCCT AGGATTGAA GAAGTTGGGA AAGCATTATG TAGATTAATA 60
TACTGGTTGG TTCCCTATCT ATGTGGAAGG TCATATTAGC TGCAATTATT TAATTTGCTG 120
TGTTATTTTG TGTATATAA CACAAATATA TTGTATATT AACTTCATT TTACTGTCAT 180
TTTCTCTGTT GTATACAAA TGAACATC TTGTAATTAT TTTCAAATAT AGAAGTATAT 240
ACATTAGATG GATTTCCAAG ATTTTGTAA NAAATCTAA ATCAGTGTT TGAGTTATTT 300
AATTTTAA TTAATCTACA AATTATGCAC NACAACTAG CAACTCGAG 349

```

## (2) INFORMATION FOR SEQ ID NO:576:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```

GAATTCGGCC TTCATGGCCT ACAAATTTTG CTCACCTTCA TTAATCAGTT GCTCAGATAG 60
AAGGAAATGA CATCTGGTTC TGTCTCTTC TACATCTTAA TTTTGGAAA ATATTTTCT 120
CATGGGGTGG ACAGGATGTC AAGTGCTCC TTGGCTATTT CCCCTGTGG AACATCACA 180
AGTGCTTGCC TCAGCTCCTG CACTGTAACG GTGTGGACGA CTGCGGGAAT CAGGCCGATG 240
AGGACAAC TGAGAGACAAC AATGGATGGT CTCTGCAATT TGACAAATAT TTTGCCAGTT 300
ACTACAAAAT GACTTCCCAA TATCCTTTG AGGCAGAAAC ACCTGAATGT TTGGTCGGTT 360
CTGTGCCAGT GCAATGTCTT TGCCAAGGTC TGGAGCTTGA CTGTGATGAA ACCAATTTAC 420
GAGCTGTTCC ATCGGTTTCT TCAAATGTGA CTGCAATGTC ACTTCAGTGG AACTTAATAA 480
GAAAGCCCCT CGAG 494

```

## (2) INFORMATION FOR SEQ ID NO:577:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```

GAATTCGGCC TTCATGGCCT AGGCACGTTA AATTTTAAAA GTTANAAAAA GAAAGATGCT 60

```

```

TTTTGCA      TTCCAGGGT AAACGGCCCC ATGCAACACA AA TCGGG AAGGGCATT 120
CAGCCTTGCA GTGGGCCACG GAGTGCACCA CGCGGCGCTC AGCCCCCAG GGAAGCGATG 180
CCCCACATCG GGCCAGAAAC AAAAGGGGGT GAGATAAAGC ATGCTCGAG 229

```

## (2) INFORMATION FOR SEQ ID NO:578:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GAATTCGGCC TTCATGGCCT AAGGAGTTTG AGATATATTT AGGAAGCAGA GCCTATAAGA 60
CATGCTGATC ACTTGCATAC ATAACTGAG AGAACTAGAG GTATAGAAGA CTTCTAGAAC 120
TTGGAGAAAT TGGATGAATG GATGTATTGT TATTGATGTA ATGAACCTTA GAGGTGGGTG 180
GGATCAGAAA GATCTATTTG CTTTCAAAGG AAATGGGGAG TGGACAGGTA TGTGGGCAGC 240
ATAAGAAGCTG GAATAACAGC ACATCTCATT CATGCCTTAA AAGAAGCTGA AACTTTGAAT 300
GTACAGCAAT GGTATTCAAT AGGTATGACT TTGCCCCCTAA AGGACATAGA CACCAGGGAT 360
GTTGTAAAT ATCCTCCAAT GCACAACACA ACCCTCGAG 400

```

## (2) INFORMATION FOR SEQ ID NO:579:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT ACGAGGACGA GGACGTCAAG GATAACTGGG ATGACGATGA 60
TGATGAAAAA AAAGAGGAAG CAGAAGTAAA ACCAGAGGTA AAAATTTTCA AAAAGAAAAA 120
AATAGCAGAG AAGATAAAAG AGAAGAACG GCAACAGAAG AAAAGGCAAG AAGAAATTAA 180
AAAGAGGTGA GAAGAACCCG AAGAACCTAA AGTGCTAACA CCAGAAGAAC AATTAGCAGA 240
TAAACTGCGG CTAAAGAAAT TACAGGAAGA GTCAGACCTC GAATTAGCAA AGGAAACTTT 300
TGGTGTAAAT CTCGAG 316

```

## (2) INFORMATION FOR SEQ ID NO:580:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

```

GAATTCGGCC TTCATGGCCT AAGCGAGGCC TGAGCCTCTG CGTCTAGGAT CAAAATGGTT 60
TCAATCCCAG AATACTATGA AGGCAAGAAC GTCCTCCTCA CAGGAGCTAC CGGTTTTCTA 120
GGGAAGGTGC TTCTGGAAAA GTTGCTGAGG TCTTGTCCTA AGGTGAATTC AGTATATGTT 180
TTGGTGAGGC AGAAAGCTGG ACAGACACCA CAAGAGCGAG TGGAAGAAGT CCTTAGTGGC 240

```



AAGCTTTTGG TTGAG AGATGAAAAT CCAGATTTTA GAGAG TATAGCAATC 300  
 AACAGCGAAC TCACCCAGAC TCGAG 325

## (2) INFORMATION FOR SEQ ID NO:581:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGNCC TTCATGNCCT ANGAGAAGNA CCCAGACCCC CCCAAGAAGG AGGAGGANCN 60  
 CCNNGAGNC NCTNCTCCAG NCGGANGAGG AGCGCAAGGC CAAGTNCGCC AAGATNGAGG 120  
 CGGAGCNCGA GGCCNTGNNC CAGGGCATCC GAGACAAGTA CGGCATCAAG AAGAAGGAGG 180  
 AGCGCGAGGC CGAGACCCAG ACGCCGCCAA GAAGGAGGAG GAGCGGCAGG AGGCGCTGCC 240  
 CCAGGCGGAG GAGGAGCGCA AGGCCAAGTA CGCCAAGATG GAGGCGGAGC GCGAGGCCCT 300  
 GCGCCAGGCG ATCCGAGACA AGTACGGCAT CAAGAAGAAG AAGAACGCTC GAG 353

## (2) INFORMATION FOR SEQ ID NO:582:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

GARWYKCSS YTTNANGGC TAGTCAGTGG CAGGGCCACC CAGAAGCCCC GCAGATGACG 60  
 GAGCTGAGAA CAGGGAATTN ACCTNCACGT GTTGCCATTT CCTCANTGGA AAGTCCTTGG 120  
 GAGGTGGCTG GGCTCAGCCT GAGCTCAGGG CTTTTCGGTG GGGTTGGGGC AGGGGCAGGG 180  
 CGGGCNNTTG CAGGTGGCAC AGGCTTCATC AAGGCAGGAC ACGGNTTCA TCAAGGCAGG 240  
 AGCCACAGCG CCCGAGCCCT GGCAGGGGAG GTAAGGCCCA GGATGGGGCA GGGCCGTGTG 300  
 CTCTGGNAC GGACATCCTT NTCTGCCAGA GACCTGCTCC CCAAGCCCTG TCCCTCCCAA 360  
 TCCCCAGGCA GCCCACTCTG CCCTCCATAG ATGAATCTAA TATTGAATTT CTAGACCTGC 420  
 CTCGAG 426

## (2) INFORMATION FOR SEQ ID NO:583:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

GAATTCGGCC TTCATGGCCT AAGAAAAGAA AGTAAGATTA TCTCCAGCCA AAATGTCAAC 60  
 CAAGAATTCT ACAGATCTAG TTGAATATGT TGACAAGAGT CATGCTTTTC TCCCATCAT 120  
 TCCAAACACC CAGAGAGGTC AGCTAGAAGA CAGACTGAAC AACCAGGCAC GTACCATAGC 180  
 TTTCTTCTT GAACAAGCCT TCCGCATCAA GGAGGACATC TCTGCTTGCC TGCAGGGGAC 240

```

CCATGGC  CGAAAAGAGG AATCGCTCGC CAGGAAGTTA C  AAGCC ACATCCAGAC   300
CATCACCAGC ATCGTCAAAA AACTCAGCCA AAATATTGAG ATTTTAGAAG ACCAAATAAG   360
AGCTCGAG                                     368

```

## (2) INFORMATION FOR SEQ ID NO:584:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 437 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GGAATTCGGC CAAAGAGGCC TAAACGACTC TTGCCCCTGT TTCTTCTTGG CTTCCCTTGC   60
GTAACAAGGA TGAAGGAGGT GGTTAACTT TATTTTGTG CTTTAACTTT TTAAAGTCTA   120
AAGTAAGTGC TTGAATCGGG TGGGTTTTCA TTTTGTGCT TTCTCACCCC TCAGGTGGGC   180
CCCTAACTTG GCCTCTCACC CTCGTGTCAG CTGTTAGACA CTGACTCAGT GGCTCAGAAT   240
ATGAAAGGCT CAGGAAGTAG CATGCTGGCC CCACCTCCCT GTCCCCATAC CTTAGCAGAG   300
CAGCTGCCCA GCAGGGCCTC CTTCTCTTTC CTAAGAGTTT ACTCCATCCA TGGTGGGTGT   360
CTTGGTAGGC CCGAGATACG AGAGGGAGTG CTGCTGTAC AAGAATTAC AGTTGTTCTC   420
TTCGCACAA GCTCGAG                                     437

```

## (2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```

GAATTCGGCC AAAGAGGCCT AGTGCAGAGT TGCAAGCAAG TTTATCAGAG ATACGCCATG   60
AAGTTCGTCC CCGCCTCCT GCTGGTGACC TTGTCCTGCC TGGGGACTTT GGGTCAGGCC   120
CCGAGGCAAA AGCAAGGAAG CACTGGGGAG GAATTCCATT TCCAGACTGG AGGGAGAGAT   180
TCCTGCNCTA TCGTCCAG CAGCTTGGGG CAAGGTGCTG GAGAAGTCTG GCTTCGCGTC   240
GACTGCCGCA ACACAGACCA GACCTACTGG TGTGAGTACA GGGGGCAGCC CAGCAATGTG   300
CCAGGCTTTT GCTGCTGACC CCAAACCTTA CTGGAATCAA GCCCTGCAGG AGCTGAGGCG   360
CNTTCACCAT GCGTGCCAGG GGGCCCCGGT GCTTAGGCCA TCCGTGTGCA GGGAGGCTGG   420
ACCCAGGCC CATATGCAGC AGGTGACTTC CAGCCTCAAG GGCAGCCCAG AGCCCAACCA   480
GCAGCCTGAG GCTGGGACGC CATCTCTGAG GCCCAAGGCC ACAGTGAAAC TCACAGAAGC   540
AACACAGCTG GGAAGGAATC TCGAG                                     565

```

## (2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```

GAATTCGGCC A      CCTA CAGAATAGCG GTACCATGAT AGAATA AATTGTGGTC      60
AGAATTACAG TATGCACAAA GAATTAATTA GCATTATTAA AGAGTCCTCA CTAAACATTT      120
CATATGATCA CACTGAAGAA CTGTAACATT CCATAGAGTG AAGTGGTTCA AATTTCTCTT      180
GGAATTTTAA CTTTGTGGTGG CCTTATTTTA TGATCCTTTT CATATTTCTT TTGACTTAGA      240
GTATTAATAC ATGGCCAAAA TAATTTAGTT ACTACCTCAT ACAAACAATA TAATGGTTAC      300
TCGAG                                                    305

```

## (2) INFORMATION FOR SEQ ID NO:587:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```

GAATTCGGCC AAAGAGGCCT AGTTGTTTTT AATGGCACAG GACTCTTCCA CTTTGTGGTC      60
CTCCTCTAGC ACAATACTGG ATGGCTGGGG CAAAAGATTA AAGGAAGTCT TTTCCACATC      120
ATTTTCTGCG TGTTCTCTAA ATCTTTTAC TAAATTGAT ACAAATTCCT CTATTTCTTG      180
ATGATATTGC TTTGAAATAG CATTGTTTAT GAATAGAATC TGTAATATAG GTCCATCTAA      240
CTTAGTATCG TTCACCAATA TTCCAACGCG TCGAGTCAGA ATGTTCAATT TTCGTTTAAG      300
TTCTTGATTC TCGGCGCGGA GCTGCTCGAT GGTCTCCACG CACTCGAG      348

```

## (2) INFORMATION FOR SEQ ID NO:588:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```

GAATTCGGCC AAAGAGGCCT ACTCATGACA GGATGACAGT CACATTTGGT AGACACCATC      60
AACCAATGAT CTCTAATTTG CGGCCCCCAA CAAGCAATGG GGTTCGTGG GCTACATCTG      120
GAATTTGAAA TGTCTCATGG AAATCATGTT CTTACCCTGG AGAAGGGTGG CTGCTTAGGT      180
GCTACTTAGG AAACCACTCT GGCAGACCAG ATCTTCCCCA ACTCAGGGGC TATGCGGGGA      240
GAAGTATTAG GAGCCCCTGA GCAGGAAGGA TGACTTAGG AAGGCTACCG GGGATGGGGA      300
AGGGTAAAAG AGCTTAGAAG CCTGGGTGAA GTTTGGGTAG ACCAAAAACA GGAGGGAGGG      360
AGGGAGGATG TTCCCTTGGA ATACAACTA GAGAAAAGCT TAGGGGANCA AGTCTTTTAA      420
TTTGGGGACA GTGAAGAGTT TCCTAAAAAT TCCTGGCCC CCAGGCCTTG GCTAAAAACC      480
CTCGAG                                                    486

```

## (2) INFORMATION FOR SEQ ID NO:589:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```

GAATTCG AAAGAGGCCT AATTGATTGT GATTAACCAA G TATGGA AAACAGTTTT 60
AAGTGTGTAG TGCATGTATC TCATAAGGTC CATTAAAGACG TTCATTATTT TTCAATTGAT 120
GCGTCTTAAG CCCCACTTGA TGTTTGTTGT AGTGCAATTC CACAGAAGGA TTCTGCACTG 180
TGGGATTGAG TTCATTTTGT TAATTGCATA ATACAACCCC ATCGTGTTTC ATAGAAAATA 240
GTAAATACTC TTGCTTTTAT TCATTGGTAT TCTTTGATAT TACTGAAGAA ATACCAAAGA 300
AGCAAAGGAG CAAAGAAATA CCAAAGAAGC AAAGGAGCAA GTGAATAGTT CTTCAAACCT 360
TTACATATTA AGGGCACGAA TGTTTCTTGA AATGTGGACA CATACTCGAG 410

```

## (2) INFORMATION FOR SEQ ID NO:590:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 61 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```

GAATTCGGCC AAAGAGGCCT ACGGCCAAG AGGCCTAATT GAATTCTAGA CCTGCCTCGA 60
G 61

```

## (2) INFORMATION FOR SEQ ID NO:591:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 211 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```

GAATTCGGCC TTCATGGCCT ATCTAGACCC AAATATTTTG AATATGTTAT CTTGTCTCTT 60
TTCTTTTGT TATATAGAGA GATTGATGCA TAAATCTGT GTTGTATGA CTGTAATTCC 120
AAGTTTAGCG AAATTGTCCC TAGGACAACA CACCAACGGC CATGAGCTGT CTCGGTCCTG 180
CAAGCTTAGT CTCCGATCCT GCCCACTCGA G 211

```

## (2) INFORMATION FOR SEQ ID NO:592:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```

GAATTCGGCC TTCATGCCTA GCCGGACCTG GTGCTCCTTT CCTTGGTGCT GGGCTTCGTG 60
GAGCATTTTC TGGCTGTCAA CCGCGTCATC CCTACCAACG TTCCCAGAGCT CACCTCCAG 120
CCCAGCCCCG CCCCCGACCC GCCTGGCGGC CTCACCTACT TTCCCCTGGC CGACCTGTCT 180
ATCATCGCCG CCCTCTATGC CCGCTTACC GCCCAGATCC GAGGCGCCGT CGACCTGTCC 240
CTCTATCCTC GAG 253

```

## (2) INFORMATION FOR SEQ ID NO:593:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 190 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```
GAATTCGGCC TTCATGGCCT AAAGAAATGA AATAATATCT CTGAATTTTA GTCCATGTTT    60
TCAATGATTT CTGACTTTAT TATATTAAC TTTATTAATG ATCACAATTT ATTTTGTAAG    120
TTTTGCAGCC AAAGGGACAA TTTATTTTGT AAATTGGGA TTCTATTTGC AAAATAGGGA    180
TCGACTCGAG -                               190
```

(2) INFORMATION FOR SEQ ID NO:594:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```
GAATTCGGCN TTCATGGCCT ACGGGGAACA GAGGATGGCG GAGGAGGGAA CACACAAGCA    60
GGAGCCCATG CAGCTGGGAG CCACTGAGAT CCCAGCTGGA GGAAGAGTGC CCTGGCACTG    120
AGGTCTAATG GCTGTCCAGC TGCTGCCCA GGATGTGAGG GCAGGTGGTA GGCCATGAAG    180
GCCGATTGAA TTCTAGACCT GCCTCGAG                               208
```

(2) INFORMATION FOR SEQ ID NO:595:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```
GAGCTATAAA ACAGAAATAC ATGCATAGCT GCAGAAACCA TGATAGGTAG AGGACTTTTC    60
TTTTGGTTTT GTTTGTTTT GTTTGTTTT GTTTTGTTT TTACAGAGAA GAGACTCGAG    120
```

(2) INFORMATION FOR SEQ ID NO:596:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 282 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAATTCGGCTTCATGGCCT AAGAAACCAA ATTAGCAGAC G AATA TAAAGCANGA 60
GGCAATACTT ATAGTGTATT AAGAACTTG CTAGACCCCA TCCAAATTAC TCAGTCTACT 120
GTTGGTTGAT AGAATTACTT TAGGAAGAGT ACGTTTTTCC TTGGAAATAC ACTGGAAGTG 180
GTACCAAACA AATCTAATAA AATGATGTTA AAGAGATTG CAGTAATTTT TATCNACTTT 240
CAGTTTGCAA ACTTTTATAA AGATATGAAA NGGACACTCG AG 282

```

## (2) INFORMATION FOR SEQ ID NO:597:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 184 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

```

GGCCTTCATG GCCTAGACAC ATACAAAGAT AAGGCTTTGA TAAAATTCAA GAGTTATTG 60
TATTTTGAGG AAAAAGACTT TGTGGATAAA GCAGAGAAGA GCCTGAAGCA GACTCCCCAT 120
AGTGAGATAA TATTTTATAA AAATGGTGTG AATCAAGGTG TGGCTTACAA AGACATTTC 180
CGAG 184

```

## (2) INFORMATION FOR SEQ ID NO:598:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

```

GAATTCGGCC TTCATGGCCT ACTTTGAGTT AAATAGAGAG TTGATTAAAT GCATATATTG 60
ACAGTTACTG ACTCAGTAAG CTTTATAATT CTAGGAATCA ATCACTGCTG ATTCATATGT 120
TTAGATATAT TCATTCTGTG CTTTCTGTTT CTTAGGCCAA AAAGAAAAAA GAAAACCAAT 180
ATTTAAGAGA AGAGAAAAAT GAAGACGGGA CATTGTGAAA TAGTCACCAT GCTGCTGGCA 240
ACCATGATTC TAGTGGACAT TTTCCAGGTG AAGGCTGAAG TGTTAGACAT GGCAGATAAT 300
GCATTTGATG ATGAATACCT GAAATGTACG GACAGGATGG AAATTAAATA CGTTCCCCCA 360
ATCCCTCGAG 370

```

## (2) INFORMATION FOR SEQ ID NO:599:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 376 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AAGACTCTTA GATCTAAAAG GAACTGACT TGCCACCTTG 60
CCAGAGGAAT TCTTGAAATG TTTCTGCAGC CACTTGGCCT TGAAAAATAA GGGTGCAACT 120
CTCAATCTT GTTCTAACCC GGCTGGAGGA ACCACAAGAC CCAATGAAAT AGCATTTTCT 180
CTCCTTTTCC CAGCACTAGT ATATAACCTA TGAGGAACCC TTGTCTCTGA ATCTGCTCAG 240

```

```

CTTGAAATTT      CTGAA GGAAGAGAAT GATCTCAGCC CTAGT      AGTCCTAGAT      300
TTCTGTGAAA TAAGAGTATT CTTCAACTTA GTGCTCACAC TCACATACCA TGAGGGTTCT      360
CTGCAGAGGA CTCGAG                                     376

```

## (2) INFORMATION FOR SEQ ID NO:600:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 479 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AAGTCACTAT TTGCTAGCTG ACTTTGTGCC CTGATTAGAA      60
ACGTGGCTCC TTTTC TGGT AGTTGTTCTT AGAACCTATC AACCTGCAGA GATTTTATT      120
TTCATGGAAG GGAAGTGAAG GTTCTTTCTT TTGCTTCAGA CGGTCACATC TTTAGATCCT      180
GAAGGGAGAG ATGCAGCTTG CTCTCTCCAG AGTCCAAATG CAGCAACAGA TTTTGCCTCC      240
ANGCAAGCAA GATATGCTAT AAAAACCTGC NACATTCCCT CACCAGCTCC TCTCTTTGAA      300
TTTTCGATGC CTCGATGGTC ATTTTCGAGAT GACAGCTTGT AGTGAGATAG CTGTGGCATT      360
GGAAGGGGGG AAGCATGCAC CATTTTCCCT AGGGCCTTCC TGCTTTTGCT TGATAAGCAA      420
TTCCTTGAAT GGCATGTTCT CCACCTCTAG CCACTTTGTT TGTAGTCCCT ACTCTCGAG      479

```

## (2) INFORMATION FOR SEQ ID NO:601:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 483 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GAATTCGGCT TCATGGCCTA CACAGGCATA ACAGTCAGTC GGGAAAAGGT CACTGAAGTT      60
GCCCTTAAAG GTGAAGGGAC AGAAGAAGCT GAATGTAAAA AGGATGATGC TCTTGAAGTG      120
CAGAGTCACG CTAAGTCTCC TCCATCCCCC GTGGAGAGAG AGATGGTAGT TCAAGTCGAA      180
AGGGAGAAAA CAGAAGCAGA GCCAACCCAT GTGAATGAAG AGAAGCTTGA GCACGAAACA      240
GCTGTTACCG NATCTGAAGA GGTCAGTAAG CAGCTCCTCC AGACAGTGAA TGTGCCCATC      300
ATAGATGGGG CAAAGGAAGT CAGCAGTTTG GAAGGAAGCC CTCCTCCCTG CCTAGGTCAA      360
GAGGAGGCAG TATGCACCAA AATTCAAGTT CAGAGCTCTG AGGCATCATT CACTCTAACA      420
GCGGCTGCAG AGGAGGAAAA GGTCTTAGGA GAACTGCCA ACATTTTAGA AACAGGTCTC      480
GAG                                     483

```

## (2) INFORMATION FOR SEQ ID NO:602:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

```

GGGCCG      GGCAGTGAAT CGGAAAGTGG AGATGATGAA AAGAAC TTGGAGAAAG      60
GACTGGGCGT GGACAGTGTG GACAAGGATG CCATGAACGC GGCCATCCAG CAGGCCATCA      120
AGGCCCAGCC GTCCATGTCT CCAAGAAGG CGCCCCCAGC GCCTGCAAAG GAGGCCAGGA      180
ATGTCGTGGC CGTGGGTACT GGTGGCCGTG GGACCCACGA CCGAGACCCG AGTGAGAAAC      240
CACCCCGGCT CCAAGTGGTTT GAACAGCAGG CGAAGAAGTT GGCAAAGCTA CTCGAG      296

```

## (2) INFORMATION FOR SEQ ID NO:603:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGAACTTTTT CATCTTTCCA AACAGAAATT CTATACCCAT      60
TAAACAGTAA CTCTCCCTTC ACCACTCTCC CCAACCCCGG AGACCTCTAT TCTATTTTCT      120
GTCTCTATAA ATTTGCCTAT TTAGGTACC TCACATAAGT GAAATCATAT ATTTGCCCTT      180
TTGCATCTGG CTTATTTTAC TTAGCATGAT GTCTTCAAGG TTCATCCATG TGGTAGTAGC      240
AGAATTTACT TCCTTTTAA GACTAGCATA CTCACACTGT TTTTGTGTTT GTTTGTTTGT      300
TTGTTTGTGTT TTGGGATGGA GTCTCACTCT GTTGCCCAAG CTGTGGTGCG GTGGTGCCAT      360
CTCGGCTCAC TGCGGCCTCT GCCTCCCGGG TTCAAGTGAT TCTCATACCT CAGCCATCCC      420
TCGG                                         424

```

## (2) INFORMATION FOR SEQ ID NO:604:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

```

GCGATTGAT GTCCGTGCCC ACCTGGACCA CATCCCCGAC TACACCCCCC CCTCTGCTCA      60
CCACCATCTC CCCAGAACAG GAGTCGGACG AACGGAAGTG TAACTACGAG CGCTACAGAG      120
GCCTGGTGCA GAACGACTTT GCCGGCATCT CAGAGGAGCA GTGCCTGTAC CAGATCTACA      180
TTGATGAGTT GTACGGAGGC CTCCAGAGAC CCAGCGAAGA TGAGAAGAAG AAGCTGGCAG      240
AGAAGAAGGC TTCCATCGGT TATACCTACG AGGACAGCAC GGTGGCCGAG GTAGAGAAGG      300
CACTCGAG                                         308

```

## (2) INFORMATION FOR SEQ ID NO:605:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

```

GGATGCTACA GAAATCACAG AAGAAAGCAG AACTTCTTGA TAATGAAAAA CCAGCTGCTG      60

```



TCGTTGCTCC	CAACG	GGCTATACGG	TGAAAATCAG	TAATT	TGGGATCAGT	120
CAGATAAGTT	TGTGAAAATC	TACATTACCT	TAACTGGAGT	TCATCAAGTT	CCCACTGAGA	180
ATGTGCAGGT	GCATTTTACA	GAGAGGTCAT	TTGATCTTTT	GGTAAAGAAT	CTAAATGGGA	240
AGAGTTACTC	CATGATTGTG	AACAATCTCT	TGAAACCCAT	CTCTGTGGAA	GGCAGTTCAA	300
AAAAAGTCAA	GACTGATACA	GTTCTTATAT	TGTGTAGAAA	GAAAGTGGAA	AACACAAGGT	360
GGGATTACCT	GACCCAGGTT	GAAAAGGAGT	GCAAAGAAAA	AGAGAAGCCC	TCCTATGACA	420
CTGAAACAGA	TCCTAGTGAG	GGATTGATGA	ATGTTCTAAA	GAAAATTTAT	GAAGATGGAG	480
ACGATGATAT	GAAGCGAACC	CTCGAG				506

## (2) INFORMATION FOR SEQ ID NO:606:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GGTGGAAATGA	AAGATATACC	TAGAACGCCA	TCTAGAGGGA	GAAGCGAATG	TGATTCTTCC	60
CCAGAACCGA	AAGCTTTGCC	TCAGACTCCT	AGGCCGAGGA	GTGTTTCTCC	ATCATCCCCA	120
GAGCTCAACA	ACAAGTGTCT	TACCCCCAG	AGAGAAAGAA	GCGGGTCAGA	ATCATCAGTT	180
GATCAGAAAA	CTGTGGCTCG	GACTCCCCTG	GGGCAGAGAA	GTGTTTCGGG	ATCCTCTCAA	240
GAACCTTGATG	TGAAACCCAG	TGCATCCCCT	CAGGAAAGAA	GTGAGTCAGA	CTCTTCTCCA	300
GATTCTAAAG	CCAAGACACG	AACCCCACTT	CGGCAGAGGA	GTGGTCTGG	ATCATCTCCA	360
GAGGTTGACA	GCAAATCTCG	ACTATCCCCT	CGGCGCAGTA	GGTCTGGTTC	CTCCCCTGAA	420
GTGAAAGATA	AGCCAAGAGC	AGCACCCAGG	GCACAGAGTG	GTTCTGATTG	CTCTCCTGAA	480
CCTAAAGCTC	CAGCCCCCTG	GGCCCTTCCC	AGACAACTCG	AG		522

## (2) INFORMATION FOR SEQ ID NO:607:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCGGCC	TTCATGGCCT	AGGCGCACCA	AGAGCAGGGC	TGTGTGTGGG	AGGCTGCAGC	60
CAGGATTGCC	TCAGCTCCTC	CCCCTCAGGC	TGGGAGGATA	GCACAGGCTA	GGGGCTCGGG	120
GTGGAGGGTC	TCAGCTCTGC	TGCCCCCACC	CCAGTACTAG	CCTAGCTTCC	CAAGCTGTGG	180
CTTAGAGGAT	AGTTGGCTTC	CTGCCTCTCT	CCTCTAAAAT	AGCAAGTCTG	GGAAATCCTG	240
GGGTGAGTGG	AGTCACCCCA	CTCCCAGTTG	CTGGCAGAGA	CTGAGACTAA	AGCATCACTT	300
AATAAACCCC	CCAGCTCGAG					320

## (2) INFORMATION FOR SEQ ID NO:608:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

(x) SEQUENCE DESCRIPTION: SEQ ID NO:608

GAATTCGGCC TTCATGGCCT AGTTGTGTAT TCTTTTCTCT GTATCATATG TGATAGTGGG	60
GTAGTGCCAA ACATTGTTAA CTCTGATGAA TAATGTCTCT TTTGGTTAGA TCATTCTTAC	120
CTTACTGGTA TCTCTACTG TTTCTTACC TAGTTATGCT GTTATTGCCT ATGGCTGTGC	180
CAGCTGCCC AAGCTAACTT GTGAGAGGGA AGGTTGCCAG ACTGAGTTCT GCTACCACTG	240
CAAGCAGATA TGGCATCCAA ATCAGACATG CGATCTACTC GAG	283

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

GAATTCGGCC TTCATGGCCT ACACATGAGT GTGACCTCTG CCATGGGGAA ACACACACAG	60
AGATATCTAT ACATATATAC ATACATACAA ACATAGGCTA TCTTGGCACA CTAATGCTA	120
AGCACTGTCT TAAGAGGTAG AGCTGGTGTG AGTGAAATTA ATGTTACATT TTCCAGCTGT	180
AAACAGACAT CTGCATTTCC TAGTGAGCTG CCAGGAGCCA GATTGGGGAA CCGTAACTGA	240
TGTGCCAGGA ATGGTGCATT GATTCCCAGT TCCAGGGATC TCTCGAG	287

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GAATGATAGG TCCTAGGTTT AACAGGGCCC TATTGACCC CCTGCTTGTG GTGCTGCTGG	60
CTCTTCAACT TCTTGTGGTG GCTGGTCTGG TCGGGGCTCA GACCTGCCCT TCTGTGTGCT	120
CCTGCAGCAA CCAGTTCAGC AAGGTGATTT GTGTTCCGAA AAACCTGCGT GAGGTTCCGG	180
ATGGCATCTC CACCAACACA CGGCTGCTGA ACCTCCATGA GAACCAAATC CAGATCATCA	240
AAGTGAACAG CTTCAAGCAC TTGAGACACT TGGAAATCCT ACAGTTGAGT AGGAACCATA	300
TCAGAACCAT TGAAATTGGG GCTTTCAATG GTCTGGCGAA CCTCAACACT CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGCCT TCATGGCCTA ACCACATGAT CCTTCGTGTT TCTTGCCCTC CATTTCCTT	60
--	----

```

GGGTGGATGG TCTAGGT GGGGTTTCCT GGTGTTGGGT TTCTC AGGGCCCTCT 120
AGGGAGGGTG CCCTGGACCC CCCACCACTC CTGGGCTGAG GAGCGTGTCA CATGATGCCG 180
TTGGTGAGGT ACTGGAAGCC GTCATAGAGT TTGGTGGTGA TAGACCGCAT ACTGCCATCC 240
ACCATCTGCT CCACCAGCAG CTGCAGCTGC TCCTCAGTCA TGCTCATGTG GAACCTCTCT 300
TTGAGGTTNC GAATGGTGCT GGAGCCATGG AAGCAAGGAA GCTGAGAACC TTGTCCATGT 360
GTTTCCGAGC GGCAATCAGC CTTGCAGCA TCA 393

```

## (2) INFORMATION FOR SEQ ID NO:612:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

GAATTCCGCC TTCATGGCCT AGGCGGGTTA AAGTCACATT TTTAAAAAGG CTAAACTCTA 60
AATGCTGTA TTTGCTCTCT CTGGAGATTA ACAAAAGTGCT TGGTTTGAG ATTGCTGGT 120
ACCGTGATCT CAATGATATG ACCGAGGGTG GGAGGGATGT GAGGAGGGAA ATCGGCAAAA 180
CCCTGGCCAG CCAGCCAGCC AAGGTGACAC ACAGCCAGAG GGGGCTCCCC TCTCCTCCTG 240
CCGTCCGGCC ACGGCTCACC ACGTGTCCA CTGGGAACGC GGCCCCGCGG CCCGAGAGT 300
CAGGCGTGAG CTTGCCCTT TTCTGAAAGG GCCTCCGCCT GGGCAGGCGC CGGGGGGCAG 360
TCCTCGGGTC CCATGGCTTA GGAGCACAGC ACTGACGCT GCAGTGGCTC GAAAGGCTGA 420
AATCCACAT TGCTCTCTAG CGATCCCGCA CTGCTGCGAC GCCCTCGCTT CCCGGCTTCC 480
GAGAGGTCCC GCAGGGAGCT GCTGAGGGCG CTGCGCTTGA GGCCCTCACC GCTGGCATAG 540
CTGTCGTCCA GGCAGGCCCG GCTCAGTGT TCCGTTGCC GACTCCTTT TGAGGCTAGA 600
GCACTGGGAC ATGCTGGGCC GCACGACGCC TTTCTGCTTC TCGAG 645

```

## (2) INFORMATION FOR SEQ ID NO:613:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GCGATTGAAT TCTAGACCTG CCTCGCACCA CCCCAAATCC CACATCCTGC ACCCCTGCCT 60
CAGGCTTCTT GCCCTCAACC CCAATATCT GAGCCTTCTC TTTTITTTTG TTGTTTTTTT 120
GAGACAGAGT CTGCTCTGT CTGTCGCACA GGCTGGAGAG CAGTGGCGCG ATCTCAACTC 180
ACTGCAACCT TCACCTCCA GGTTCAGCA ATTCTCCTGT CTCAAGTGCC TAGATACCTT 240
GGTAATGATT CCATTGGCCC CACCATGCCC TGTCTGCCT TCCTGGCTGT GCCCAAGCTT 300
GGTCCCTGCC TGCTGCCTC ACTCTCTGGG TCTCGAG 337

```

## (2) INFORMATION FOR SEQ ID NO:614:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

( SEQUENCE DESCRIPTION: SEQ ID NO:614

```

GAATTCGGCC TTCATGGCCT AGGTTTATGA ATTTTATATG AAGTATCTTA TTTGATTTC      60
ATAATAACCA TAGAAGATAG ATACTATTAT TATCCTTGGA TTATAGATGA AATTGAAGAT      120
TGCTTCGCAG GTAGAGTTAA GATCCAGAAT GGTGACAAGA AGTATAATGT CTGCTTTTAT      180
GCCATAATAT ATCAGACTAT TCTGACTCAT TTAGATTACT TCAGGGCTAT CACTGAAGCT      240
TACAGTATTA TCACTACTGT GATACCCCTG CTCACACAAT TTGGTAAGTG TTTTGTATC      300
TTTTAGAACT TATACATTAG GCAGCAGCTA TCTGTTTGGT CAGCTGAAAG ACGGCCACAG      360
GATTTGCTTC TGGGTGGCCA TTAGCACCTT TCACCCATGC ACCAGAGAGA TACTTCCAGC      420
ACGAACTCGA G                                     431

```

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT ACCAAAATTG TGCATACCCT TGGGATGAAA ATCATTGTAA      60
AGAAAAGAAA AAAGCAGGAN TATTTGAACA AATCACTAAA ACTCATGGAA CAATTTTGG      120
CATTACTTCA GGGATTGTCT TGGTCCTTCT CATTATTCTT ATTTTAGTAC AAGTGAAACA      180
GCCTCGAAAA AAGGTCATGG CTGCAAAAC CGCTTTTAAT AAAACCGGGT TCCAAGAAGT      240
GTTTGATCCT CCTCATTATG AACTGTTTTC ACTAAGGGAC AAAGAGATT CTGCAGACCT      300
GGCAGACTTG TCGGAAGAAT TGGACAATA CCAGAAGATG CGGCGCTCCT CCACCGCCTC      360
CCGCTGCATC CACGACCACC ACTGTGGGTC GCAGGCCTCC AGCGTCAAAC AAAGCAGGAC      420
CAACCTCAGT TCCATGGAAC TTCCTTTCGG AAATGACTTT GCACAACCAC AGCCAATGCT      480
CGAG                                     484

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGCGTTCCTG GTTCCGTCCT TGTACATAAT ATTGTACAGC      60
ATTCAACCAC TTTTGTGAT CAGCAAAGTA GTCTCCAATG GCATTGTTGG CTTGTTCCAG      120
GAGACTGTCA TCTGCATCAC CAGATCCAGT TTTCAGGAGC TGGAGTACTC TAAACCAATC      180
CCCCAATTC AGCCGGAGGC CAATAGCAAG ATCCCTTCTG TCCATCTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) S      ICE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC	TTCATGGCCT	ANAATGCTTC	ATGAACTNGC	NGACAGGACT	GACACAGCTN	60
AGCTTTCTCTG	ACTGATTCGG	GGCCATGCAG	TCTACCAAAG	GGCTAGCTGT	TGAGACAATG	120
AGGATCAGGG	ACATTTGCCC	TCGTTCTGAA	TGTCCCCAGC	CACAGTACNT	ACATNGTTCT	180
TACATGTACC	TTCCCCCTCG	GTGACATTTT	ATATTTTCCA	AGNTGGCCAC	ANCNGTTCCC	240
TTCCCTTTCT	NNTNGNGNNG	NACACTCACA	CCCGTCTCTG	NGAGGTGAGG	CCACATATTC	300
TCTTTTCTGG	AATTTGGGTG	GGCCTGTGAC	AATGGCAGGA	CAATGCTGAG	TGGCTATGTC	360
ATAAAGGCAA	TACCCCTTCC	ATCCAATTCT	CTTGGGATGC	TCATGTTTAG	AATCCAGCCA	420
CCATGTTGTG	AGGAAGCCCA	CGTCACCTAT	GAAGACCTAC	ACAGAAAAGA	CTCAAGGCCC	480
CAGGCACTTG	AGCTGAAGGA	TGAAAAAGAG	TTAGTCAGCA	GGGGAAATTG	GGGAAAGGGT	540
ATCTGGTAGA	AAGAAGGAAC	AGCTTGTGCA	GAGGTNCAGA	GGCAAGAGAG	AATTTGGCAT	600
ATTTGGGAAG	CTGCAAAAGA	TCTCGAG				627

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC	TTCATGGCCT	ACGACTTCAA	AAATATGGGA	ACACAGTTAG	TTATTTTAC	60
ACAGTTCTTT	TTGTTTTGT	GTGTGTGTGC	TGTCGCTTGT	CGACAACAGC	TTTTTGT	120
CCTCAATGAG						130

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCGGCC	TTCATGGCCT	ACTGGGGGAG	GGGAAGGATG	TGGTTGNAG	AGNGGAAGCA	60
GAGTTTGGAA	ACGCATGAGA	GCAGAGCTTC	GTGTGTTCCC	ACCCTCANTG	AGGANGTGTG	120
AGTGGGTGAG	CATGTGAGAG	TTGGGTGTTT	CTACCCTCAG	TGAGGAGGTG	TGAGTGGGGG	180
TGCATATAGA	GGCAGTGCCT	GCTGTGGGGT	CACAACTGGT	GCATGCCAGC	GCCAAAGGGA	240
CCTGTCTTTA	GGGGTCATTT	CAGCCAGCTC	CTCCCATCAC	AGATGACAGC	TCCAAGCCTA	300
GAAGGGGCTC	AGTGACAGGG	CCAGGACAAG	CCCTCAGGAC	TGTGGCCTCC	TGGCCCTTGG	360
TTCCCCTGCC	CCACAACATG	GTCTCCACAT	GGCTGGCTGG	CTGGCTGTCC	CTGTGTGTGT	420
GTGACACAGC	GTGTGAGTGC	AGGGCTGTGC	CCGGGGTGGG	AGGGTGTCTA	TGTGGCACTG	480
ACTATCGAGC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(: MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGCC TTCATGGCCT AGCTGATGAT TCCAAACATT TNGTAAATTA ATTTTCTCT	60
CTTTACCTTT CAGCTTGGAA GGAAGACAGA AGCCTTAACC TCCAGGGTAA CATGTTGCAA	120
TTTGTTCACT TATTAATCTA ACAAGAATGC ACTGAGGTGC TCATTAAATG TCAGACCTTG	180
TGTGAGGTG AGGAAATCCA AAAGCAAAGG AGGCATGAAC CTCCATGCCC ATTCAGAAGG	240
GCACCAGGCC TTTAAGAAG GGTGGATATG CACAATTGA AAATAACTGA TAGTCCTGAC	300
TTATCTTTCG AATTAATAAG GCAATTTTCAT ACACATTTTA TACTCGAG	348

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC TTCATGGCCT AGCAGGATGG CACCGGACCC CTGGTTCTCC ACATACGATT	60
CTACTTGTC AATTGCCCA GAAATGCTG AGAAAATCA ACAACGAAAT CAATATGAAC	120
GAAAGGTGA AAAGGCACCA AAGCTTACCG TGACAATCAG AGCTTTGTTG CAGAACCTGA	180
AGGAAAAGAT CGCCCTTTG AAGGACTTAT TGCTAAGAGC TGTGTCAACA CATCAGATAA	240
CACAGCTTGA AGGGGACCGA AGACAGAACC TCTTGGATGA TCTTGTAAC CGAG	294

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC TTCATGGCCT AGGTCAAGGG ACAATGAAAA TGTGACCCTT ACCAACGACA	60
GAAACTCCCA GGAAGCCACA ATTAACCTCA GACCACCAGG ATATTTGGGG AAGTTTATCC	120
TTCTGGAAC CAGAATTTCT GATTGTGGA AAATTCTATA GATATTCTCT GCCAGACTCC	180
AGCCTATTG TGTGAGACAT CTGGGGAGGC TCCCTTTT TTCAACATTT GAGGACTGAA	240
AGTAAATTGA GCTTCCTCAG CAGAAAGAA AGAAGCTGTT TTGGAGGTTA GGAAGAAGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCGGCC	NTCATGGCCN	ACTCTATTGG	TGCAAAGTAA	GATTTACATC	TGTGTTGAGA	60
ATCTTTGAGA	TAATACCCCT	TTTCTACATT	TCTGCATTTT	TTTTCTGTGA	NCCCCACTAG	120
TATTNCNCCA	TTTTNACCTT	TTCATTTAAC	TTATCCTCAC	ATTATAAGAG	ATGGATGACC	180
TATACAGACT	TGGCCTTTGG	GCTTTGGCTT	CATTCAATAT	CATCTTGGGT	ACCACTGAAT	240
ACCGTTCAAT	CTAGAGCTGG	GTGGTAGGTT	GAGATGTATA	TTTCCTAGCC	CAGATCCCAG	300
AATCTAGAAG	AAGTTAAATC	TGATATGACT	TTGATAAATA	AGACAGTATG	TTCTTCTAAC	360
CCCATCTCCC	GTTCTCTGAC	ACTGAACATA	TATATGAAGT	ATATATAACA	TATACCGAGT	420
ATTTAAATTT	TTAGAATAAA	AATGTGCATT	ACTGCACATC	TTCTGTCTTT	TCATTCTCTG	480
GTTGAGTTTC	CCTCGAG					497

## (2) INFORMATION FOR SEQ ID NO:624:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCGGCC	TTCATGGCCT	AGAGCAAGCA	GAGGTGGCCT	CGGTGTGTAT	GTGCTCATGT	60
GTATGTGTGC	ACATGCATGT	CTGTGTGTGG	ATGCCCATGC	GTGTAACATC	TGATGTGGCA	120
CATGATACAA	CATAATTTAT	TTATTATAGA	AACCTGCAAG	TAAAGATTCA	AGAGGAATCG	180
CAGATCCCAA	TCAAAGTGCC	AAGTGGTAGG	TTACCCTGAC	AGATAGTACC	TCCCTTTTTT	240
ATTTTCAAA	TGCTGGCATA	GTTTTGTGTT	CTTTACCAAC	TCATTGATTT	ACTGGGGACA	300
TCCTCTGTAC	TTATCACAAC	AGGTTCTCGA	G			331

## (2) INFORMATION FOR SEQ ID NO:625:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAAGTTGCAT	TACACCTTCT	CTTCTGAAGT	AAACACTAAA	AATATCAGGT	AACCTCTGCA	60
TTAAATTTTC	TGCCATCTGA	AGTGCTCCCA	CTTACTATCT	TCAGGTCTTG	GCTTGACAGC	120
ATGGAAGCAA	TGTGACTTGA	AACAGCATGA	TTTTTCAGAA	CATCCTTCAG	AAGTTCAGCA	180
TCCGCAAAAT	AAATTATCCT	AAGAATTGCT	CTAAGGCACT	TATGTCTGAC	CGCAGGTCCT	240
GCTGAGGAAC	TATACACTTC	ATAAAGAACA	CAAATAATG	TCTTAATAAA	AGACTTAGCC	300
AGTTCCGGAT	CCTCTTTCAT	AAGCTGTGCT	CGAG			334

## (2) INFORMATION FOR SEQ ID NO:626:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GAATTCGGCC	TTCATGGCCT	AGTCGGATTC	CCAGTGGAAC	TTTAGTAGTA	CTCAGATCCT	60
CCTTTGTTTG	GTGCGTAGTA	TATTAACAAG	TAAACCTGCC	TGTATGCTCA	CCAGAAAGGA	120
AACAGAGCAT	GTCAGTGCTT	TGATCCTGAG	AGCCTTTTTG	CTTACAATTC	CAGAAAAATGC	180
TGAAGGCCAC	ATCATTTTAG	GAAAGAGTTT	AATTGTACCT	TTAAAAGGTC	AAAGAGTTAT	240
AGATTCCACT	GTATTACCTG	GGATACTCAT	TGAAATGTCA	GAAGTTCAAT	TAATGAGGCT	300
ATTACCTATC	AAAAAATCAA	CTGCCCTCAA	GGTGGCACTC	TTTTGTACAA	CTTTATCCGG	360
AGACTCTCGA	G					371

## (2) INFORMATION FOR SEQ ID NO:627:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGCCT	TCATGGCCTA	GATGTTTCAA	TTTCGAAGTA	CTTTTGAAC	TTAGTAATGT	60
CAGAGTTGAA	CATTTTCTGT	AGCATGACTA	TCGACTTGTC	TTTTCAAGGC	AGCCTGCAAA	120
GCCATTGAAC	AAGCAAAGAC	TCAAAACATC	AATAAACTGG	TTCTGTATAC	AGACAGTATG	180
TTTACGATAA	ATGGTAAGCT	TTACATTG	ATTCTTCTG	TTTTTCCAGT	AACTGTGAAG	240
GGAAATTGGT	AGGAGGTGTT	GTAACAGGGC	AGGACCCAAA	TGGGAACGGG	GGGATGACAT	300
TGTTTTGTCA	GGTACCGAGC	AAAGAGTGAG	GATTTTGGAG	TCTCCCTTCT	GCTGCTCTGA	360
TGTTTTCCAC	ATGCTTATTT	CTTTGCCAGG	CACTGGAGAT	GCAGTCAGAA	GTGGAAGTGG	420
CTCTTACTTC	TAGTCTGTGT	GTGTATAAGT	CACTTAAGAT	GGCGTGTTGA	CTGCTTCTTT	480
GGGAAATGCC	CTGAATAGGA	GCATGTAGGG	GATGTGCTCG	AG		522

## (2) INFORMATION FOR SEQ ID NO:628:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCGGCC	TTCATGGCCT	ACAAAATATC	TGTGGGAAGG	TGAGCTACTT	AGCATTCAAC	60
AATGCAAAGT	TTCAAAGCAT	TTTGCAAATT	TTAAATATAC	GCTATAATTC	TTCTGTAATT	120
GGTGTCTTTG	GTACTTTTTG	GGTAAATTGG	AGTTATTCCA	AAATAATTAT	ATTTTATAGC	180
ACTTTTGACA	CCATAACACT	TAGCATCTCG	AG			212

## (2) INFORMATION FOR SEQ ID NO:629:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:



GAATTCGGCC	TTGGCCT	ACTCCTTCG	CGCGAGTCTC	TGGAG	GCAGCGCGAG	60
TTGCCGCCGC	TGCTGCCCGG	GGCCGGCTTG	CCTTGCGCCA	TGGACTGGCA	GCCAGACGAG	120
CAGGGCCTGC	AGCAGGTCTT	GCAGCTGCTC	AAAGACTCAC	AGTCGCCCAA	CACAGCCACT	180
CAGCGCATCG	TGCAGGATTA	ACTCAAACAA	CTCAATCAGT	TTCCTGACTT	CAACAACCTAC	240
CTGATTTTCG	TCCTGACCAG	ACTCAAGTCA	GAAGATGAGC	CAACGCGCTC	TCTCAGTGGC	300
CTCATCTCTCA	AGAACAACGT	GAAGGCACAC	TATCAGAGCT	TCCCACCCCC	CGCTCGAG	358

## (2) INFORMATION FOR SEQ ID NO:630:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 168 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

AAGAGAACAA	TAAATAGGC	AGTCTCTAC	CTCTGTCTT	ACTCTAATAT	AAACTCCATG	60
AAGATAAGTA	TTGTATCCAT	ACTGTTCATG	CTGCACAGCA	GTGCCCCTTA	TCTGCAGGGC	120
GACGCATCCC	AAGACCCCCA	GTGGATGCTT	GAAACTGCAG	AACTCGAG		168

## (2) INFORMATION FOR SEQ ID NO:631:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GAATTCGGCC	TTGATGGCCT	ACATAACTGC	ATTCTGACCT	CCTTCTTGCA	GTGCCAAGAG	60
AAATGATGGT	GAACCTAAGT	CGGGGTGTGG	GGTCGTTCTC	AAAATGCCGT	CATTGCTACA	120
GAACCTAGGT	TTTTGGTTAG	TTACATNCTT	TGTGGAAGGA	CAGGGTGGTG	GGTACAGGTC	180
CCTGAGAAGC	AGACATGTGG	AATTGTTTGA	GACAATCCTA	CTCCCTGTGG	TACTCTCTCT	240
ATGTATATAT	TCCAATGAAG	GTAATTTACC	TCATGCTTTC	CTAAATACAT	AAATCTTTAC	300
ATTTCAAATG	CCTTGTTAGA	CTGTACTCAA	GATTCCAGAG	ACATTTTAAA	ATAATTCATT	360
TTCAAATCAT	AAATTGGGA	AANGGGGCCC	TGGGATAAGC	AAGTTGACTG	GGCCACTGCT	420
TATGCCATTG	CCTGCACAAT	TCTGGGCATG	GAGCAGCTCT	CCCAGAGCCC	ACTCGAG	477

## (2) INFORMATION FOR SEQ ID NO:632:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAATTCGGCC	TTCATGGCCT	ACTGCCTCCT	GATGAAGTCC	CTACTGTTCA	CCCTTGNAGT	60
TTTATGCTC	CTGGCCCAAT	TGGTCTCAGG	TAATTGGTAT	GTGAAAAAGT	GTCTAAACGA	120
CGTTGGAATT	TGCAAGAAGA	AGTGCAAACC	TGAAGAGATG	CATACAAAGA	CTACAAGAAT	180

TTCAACA	CAGCAACAA	CAGTCAACAA	CAACTTTGAT	GA	ACTACT	GCTTCGATGT	240
CTTCGATGGC	TCCTACCCGT	TTCTCCCACT	GGTGGAAAT	TCCCAGCCTC	NGTCTCCTGC		300
TCTAGGATCC	CCGACCCATT	AAGACTCGAG					330

## (2) INFORMATION FOR SEQ ID NO:633:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC	TTCATGGCCT	AGGAGAAGGC	CCTGCAGGCC	GCATATGGCG	CCAGCGCCCC	60
CAGTGTGACC	TCGGCTGCCC	TCCGGTGGAT	GTACCACCAC	TCACAGCTGC	AGGTAACCAG	120
CGACCCCTGGG	TGCTCAGCTT	CTTCCCTTCC	AGGGGGACCA	GCGTCACCTT	TAGGTGAAGC	180
CCAAAGCATT	TGATTCTGA	ATTCTCTGA	AATTTTCTT	TCTTCCAATT	CTCATAAGCA	240
CTCTTCCAC	TGGTCTTTGA	TGGTATCTGA	GTGGAGGCTT	TGTAGTGAGG	GATTTTCATT	300
ACAGGGATTT	TCTTATTCCT	TAGGCTTCT	GAAGTATGAT	TATCCCAGTG	TTATTGATGA	360
GGAAACCGAG	GTTCAACCCAG	CTATTCTCGA	G			391

## (2) INFORMATION FOR SEQ ID NO:634:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

GAATTCGGCC	TTCATGGCCT	AAGTACAAAT	ACCTATTATG	TTGGTTGGGA	ATAAGAAAGA	60
CCTGCATATG	GAAAGGGTGA	TCAGTTATGA	AGAAGGGAAA	GCTTTGGCAG	AATCTTGGAA	120
TGCAGCTTTT	TNGGAATCTT	CTGCTAAAGA	AAATCAGACT	GCTGTGGATG	TTTTTCGAAG	180
GATAATTTTG	GAGGCAGAAA	AAATGGACGG	GGCAGCTTCA	CAAGGCAAGT	CTTCATGCTC	240
GGTGATGTGA	TTCTGCTGCA	AAGCTGAGG	ACACTGGGAA	TATATTWAC	CTGAAGAAGC	300
AAACTGCCCC	TTCTCCTTGA	AGATAAACTA	TGCTTCTTTT	TTCTTCTGTT	AACCTGAAAG	360
ATATCATTTG	GGTCAGAGCT	CCCCTCCCTT	CAGATTATGT	TAACCTGAG	TCTGTCCAAA	420
TGAGTTCACT	TCCATTTTCA	AATTTTAAGC	AATCATATTT	TCAATTTATA	TATTGTATT	480
CTTAATATTA	TGACCAAGAC	TCGAG				505

## (2) INFORMATION FOR SEQ ID NO:635:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

GAATTCGGCC	TTCATGCCTA	CAAATATGTC	CTCTGTCAAG	ACCCCTGAAA	CAGTTGTCCC	60
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```

CACAGCCCCCT TCCAGA TTCCACCTC CACAGACCAA CCTGT C CTAAGCCCAC 120
ATCTCGGACC ACTAGGAGCA GGACAAATAT GTCCTCTGTG AAGAACCCTG AATCAACTGT 180
CCCTATAGCC CCTGAGCTCC CACCTTCCAC CTCCACAGAG CAGCCTGTCA CCCCTGAGCC 240
CACATCTCGG GCTACTAGGG GAAGAAAAAA TAGATCCTCT GGCAAGACCC CTGAAACACT 300
TGTCCTCCACA GCCCCTAAGC TCGAG 325

```

## (2) INFORMATION FOR SEQ ID NO:636:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GAATTGGCCT TCATGGCCTA GCTTCCTCTT CAAAAATGTG TCTACCTAAG ATACTATTAT 60
TTAAGCCTCT GTGTACTTTT AACCGTAGAA CTGATTTTAT AGGAAGACGA AACTGTGCGG 120
CTTTCAAGAC ATGGAGTGTG TGCCTTGTGG AGACCTCCTT CCTCCTTACG AACCGCACTC 180
TCATCCACAA AGAACCTCGA G 201

```

## (2) INFORMATION FOR SEQ ID NO:637:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```

GAATTCGGCC TTCATGGCCT AGGCAAAGCC TGAAAGTCCT TGGACTTCTC TGACCAGAAA 60
GGGAATTGTT CGAGTTGTAT TTTCCCTT TTTCTCCGG TGGTGGTTAC AAGTAACATC 120
AAAGGTCATC TTTTCTGGC TTCTTGCTT TTATCTTCTT CAAGTTGCTG CAATAGTATT 180
ATTCTGCTCC ACTTCTAGCC CACACAGCAT ACCTCTGACA GAGGTGATTG GGCCGATATG 240
GCTGATGCTG CTCTGGGAA CTGTGCATTG CCAGATTGTT TCCACAAGAA CACCCAAACC 300
TCCTCTAAGT ACAGGGGGTA AAAGAAGAAG GAAATTAAGA AAAGCAGCCC ATTTGGAAGT 360
ACATAGGGAA GGAGATGGTT CTAGTACCAC AGATAACACA CAAGAGGAAT GCTCGAG 417

```

## (2) INFORMATION FOR SEQ ID NO:638:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```

GAATTCGGCC TTCATGGCCT ACCCTCCTCC AATGAGTCCC GCCAATGCCC CAATGCCCCG 60
TGCCAGTTTCG CTTTCTACGG TGGTGAGTCG GGCTACCACC GGGCCCTGCT GGGCCTGCAG 120
ATCTTCAATG CCTTCATGTT CTCTGGTTG GCCAACTTCG TGCTGGCGCT GGGCCAGGTC 180
ACGCTGGCCG GGGCCTTTGC CTCCTACTAC TGGGCCCTGC GCAAGCCGGA CGACCTGCCG 240

```

GCCTTC TCTTCTCTGC CTTTGGCCGG GCGCTCAGGT ACAGG CTCCTTGGCC 300  
 TTTGGCGCGC TCATCCTGGC CATTGTGCAG ATCATCCGTG TGATACTCGA G 351

## (2) INFORMATION FOR SEQ ID NO:639:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GAATTCGGCC TTCATGGCCT AATTTTTTTG AGACAGAGTC TTACTCTGTT GCCCAGGCTG 60  
 GAGTGTGGTG GTGCGATCTC GGCTCACTGC AACCTCTGCC GCCTGGGTTC AAGCTATTCC 120  
 CTGCCTCGGC CTCCCAAAT ACTGGGATTA CAGGCGTGTG CCGCTGTGCC CAGCCGCTGT 180  
 CTAGTCTTTT AAAACTTGGT GTTTGAGCAT GCACATTCTC CTTCTGGAAT ACCTGATCAC 240  
 CCAGCACAAAC TCACGTTNTC TTTCTGCTGG CTACCCTTGC CTTGCTGTGA CTGTGTCATG 300  
 GTTCTCAGCT AGACTCGGTG GCGTGTGTTGA TGGCCCAGGC ATCGTCTGCC CAGTGGGTGT 360  
 CCTGTTACCC ATGTATGACA GACTGTACCC AAGATATCAG TCTTACGAAT AAGGCCACGA 420  
 TGAACACTTT GAGCTTTTTC TGTATCTAGC ATATCCCAG GGTAGATGCT CAGGCAGGAA 480  
 ACTGGTGGGA GATGAGGGAT ACACAGATGG CTCCCNACAG GTGCTGTGAG GTGCTCAGGA 540  
 GTTTATCATC ACTTAACGA GCTCGAG 567

## (2) INFORMATION FOR SEQ ID NO:640:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCGGCC TTCATGGCCT AGCTCCGCAN AGGTAGGGAG GGAAGGGCCC CTCAAATANA 60  
 TGGAGGGAGC AACATCCCTC CAAGGGAAG GGCTTCCAAN ACNAAATCCT GGACAGAAGC 120  
 GGAGCANGGG ATGGGCCTCC TTACAGAGCA GGAGGAAGAC AGCGCTCTTC NAANANGAAA 180  
 GGAGAGGGGC ATCAAGGTCC CTCACAATGG TGGAGGGGGC GGGGCTTCTC ACCGAAGGCA 240  
 GAGGAGGGGG CCTTAACTGA GGGGCAGGGC GCCTCCCAGG GATGAAAGGA GGAGGCCTGC 300  
 CGCAGAGCAG GGAAAAAGTT CAGTCCTTTC CTGCATTCTT TGGCTGAAGG GGTCTTAAGA 360  
 TGAAGGGTTC AGTGTCCAGA AGGAAAAAAC CCTGAGATGG GCCTAGACCA ACATGAAGTC 420  
 AGCTAGCAAG TTCATACATG ACATGGGACT GATAGACTTG TGTGGCATCT CGAG 474

## (2) INFORMATION FOR SEQ ID NO:641:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

```

GAATTCGGCC TCCCTTG AGAATATCAG AATTAGAAAG CCAGGT GAAATGCATA      60
CTAGTTTGAT TTTAGAAAAA GAACNAGTAG AAATTGCAGA AAAAAATGTT TTAGAAAAAG      120
AAAAGAAGCT GCTAGAACTA CAGAAGCTAT TGGAGGGCNA TGAGAAAAAA CAGAGAGAGA      180
AAGAAAAGAA AAGAAGCCCT CAAGATGTTG AAGTTCTCNA GACAACTACT GAGCTATTTC      240
ATAGCAATGA AGAAAGTGA TTTTAAATG AACTCGAG                                278

```

## (2) INFORMATION FOR SEQ ID NO:642:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

```

AGGGAGAGGA GGCTGGGAAC AACGTGACCC ACTAAGGATT CTGCTCCAAG GACAGTGGGT      60
TTCCCGCTGG GCACCCACTC TTAAGTGAGC ATCGGGAGAC TAAGACAGGA ACACCCGCCG      120
TGGGCAGGCC AGGCTGGAAG GATAGAGGAC TGTGGTCGAA CCAAGAGGAG GTTCAACTGT      180
GACTTATGCC AGTGTGGTCA CGAAGGCAGA TGGTTGAAC TGAAAAGGGG GCACCGGTTT      240
CTGGCATGGA GGCACCCAAG GTCTTAGGAG GTGGATGGAC TGTCACATGG GCAAAGAAAT      300
GTCCAGGGC AGGACTGCAA AGGCCACAGA AGAATAATTT GGGAGAGAGA CAACCCATGA      360
GAAGTCACTC AGACCAGGGT CAGAAACAGA ACAGGAACAA CAATGGACTC GAG              413

```

## (2) INFORMATION FOR SEQ ID NO:643:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 658 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```

TTTCNTCCCT TNGAATGTTT GTCCTTTTTT CCTGTTTTTT TTTCGCACAA AATTNCAAGT      60
TNTACCAAGC AAACATTAAA TCCAAGTTGG AATTTTAATT AAGGAATTCG GCCTTCATGG      120
CCTACTGGTG CCTTCCCGGA AGGGCTCAGA GCGGGGCTCG GGCAAGCACT TTAACCTTTT      180
AAGCCCAACC AGATGAGTTG CCTGCAGTTT TGGAGGCCTT CAGAGCATTT CACTAGACCT      240
CTGTCTGTGT CGGTCCAATG TCTTTAGCCA AGCTTTGATT AAAGATGACT TCCTTGTTTG      300
CTCAAGAAAT TCGCCTTTCT AAAAGACATG AAGAAATAGT ATCACAAAGA TTAATGTTAC      360
TTCAACAAAT GGAGAATAAA TTGGGTGATC AACACACAGA AAAGGCATCT CAACTCCAAA      420
CTGTTGAGAC TGCTTTTAAA AGGAACCTTA GTCTTTTAAA GGATATAGAA GCAGCAGAAA      480
AGTCACTACA GACCAGGATT CACCCACTTC CACGGCCTGA GGTGGTTTCT CTTGAGACTC      540
GTTACTGGGC ATCAGTAGAA GAATATATTC CCAAATGGGA ACAGTTTCTT TTAGGAAGAG      600
CACCATATCC TTTTGCTGTT GAAAATCAAA ATGAAGCAGA AAATACCATT CCCTCGAG      658

```

## (2) INFORMATION FOR SEQ ID NO:644:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

(x) SEQUENCE DESCRIPTION: SEQ ID NO:644

```
GAATTCGGCC TCATGGCCTA CCAAAGAGTG TTATACATGC TCAGCAAACA ATATCTACAG      60
GAAGTAGCCC TCAGGAAAGT AAAAAAAAAA AAAAAAAAAA GCAGCAGAGG GCCAGCCCAT      120
TCTTCTCATA GCTCACTGAT ACACTTGGTC ACATTCTGCC ACTACCTGCA AGGGAGGCTG      180
CGGAAAGGTA TCCCTACAGA GGCAGACGTG CCCAGCAAAA ACTTTGGCCG GTGGGGGGAC      240
ACTCCATGAC AAAAAATACA AAGGAGAGAA TGGGAGCTCG AG                          282
```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 172 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```
GAATTCGGCC TTCATGGCCT ACCTTTCTCT GACCTGTGCC CTCGGCCTCT TGGCCTCCAT      60
CGCCATGACC TTTGCCACCC AGGGCAAGGC ACTGCTGGCT GCCTGCACTT TTGGGAGCTC      120
TGAAGTACTG GCCCTCGCAC CTGACTGTCC CTTGACCCC ACACCACTCG AG                          172
```

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 293 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```
GAATTCGGCC TTCATGGCCT ACCAGAAACC GGCCAGGCAA GGAAAGAGGC CGGTCACCAG      60
AAGCCAGCAG GCGTGGGGTG TGATACTCTC TATAGCCACT ACAGGGCGCG CGCAGGTCGC      120
GGATCTCCCC AGTTGCTAAT CCCGGCTCTG CCACTCAATC CTATCCCTAG TTCCCGAGCG      180
CGGGTCCCCC GCCTTGCACT CTCCAGCCGT GCGGGGCCGG GAGCAGGCCT CCGGCCTCCC      240
AGACTTCTAG AGCCCGCCGG GCCCATCTTT GTACTCATCC ACCCCGGCTC GAG                          293
```

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 272 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```
GAATTCGGCC TTCANGCCT ACAGAAACAG AAATGCTAAC TGAAATGTAT TCTTCTAACA      60
AAGCATTTCT AACTTTCTAG AATGTAGTCT TTCATTTTTC TTTATCTTTT TTCAGCTTAT      120
TCCCAAATAT ATACTTTGGC CATTTAAATA AATGGCCAAA GAAATGGCCA AAAAATGCTT      180
TATTTAGTTT TTGTTTATT ATGAAGGATG ATTACTCTTT AATGCTGCTA AATTCCTTTC      240
```

TAGCTCTGTA      CTTCA AGAAAACTCG AG

272

## (2) INFORMATION FOR SEQ ID NO:648:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

GCGAGCTGTT GGGATTACAA AGTTGCGCGT TTCATCGGTA CAACTGGTC TTTGAACCTC	60
CTTTGTGAGA GCAATTGTAG TGTCCAAATT GTTAGGGAAA AAAAAAAAAA AAAATCCCAA	120
GGAGGAGGGT TTTCCCCCT TCCCTGTTTG GTTTATCACA GCATTTTGCT TTTTTTTGG	180
CACAGCTTTT TACGTTCTT TCCATTACAG CATCACAGAG CCTGTTCCGG GTGGAAACCA	240
ATCCACACGC CTCGAG	256

## (2) INFORMATION FOR SEQ ID NO:649:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCGGCC TTCATGGCCT ACCCACCTTG GCCTCCACA GTGCTGGGAT TCCAGGCGAG	60
AGTCCCTGCG CCCAGCCCCA CTTGTCTATT CTTGTTTTTG CTGCCTGTTT TTGGTGCTTT	120
ATCTGCACAT GAATATTTAT AGCAGCTTTA TTCATAATTG CCAAACTTG GAAGAAACCA	180
CAATGACAAT GTCCTTCTAT AGGTACACCC ATACAATGGA ACATTCAGTG ATAAATGAG	240
CCATCAAGCC ACCCAAAGG CTCGAG	266

## (2) INFORMATION FOR SEQ ID NO:650:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 490 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GATTTCTCAG CTTTTGAACA GAGTGGACTT GTCAATATCA GAGCAGAGCA CCAAACTGAA	60
GATGTCTCAC AGAGACAGTA ACCACCAGCT TCAGCTTTTG GACACTAAAT TTAAAGGTAC	120
AGTTGAGGAA CTCAGTAACC AGATATTATC TGCACGGAGT TGGTTGCAAC AGGAACAAGA	180
ACGGATAGAA AAAGAGCTTT TACAGAAAAT TGATCAGCTT TCCTTGATTG TTAAGGAAAA	240
CAGTGGAGCC AGTGAAAGGG ATATGGAGAA GAAGCTCAGC CAGATGTCAG CCAGGCTTGA	300
CAAAATAGAA GAGGGTCAAA AGAAGACTTT TGATGGTCAG AGAACAAAGC AAGAAGAGGA	360
GAAGATGCAC GGGCGAATCA CCAAGCTGGA GTTACAGATG AACCAGAACA TCAAGGAAAT	420
GAAGCAGAA GTTAATGCTG GGTTTACAGC CGTCTATGAA AGCATAGGAT CCCTCAGGCA	480
AGTTCTCGAG	490

## (2) INFORMATION FOR SEQ ID NO:651:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GAGATAGAGG GGACCCTGGC TATGGACATT TTGAATTATG TCGGGAGAGC TGATGGANAA      60
AGAGGCTCCN GGAGGACTGG TTAACCTGAA GCCNGGAATG AGATGAAATG TATAAAATTC      120
TCTTGAATGA TTATGAATAT CGTCAGAAAC AAATCNTAAT GGAAATGCA GAACTTAAGA      180
AGGTCTTCA ACAATGAAA AAGGAAATGA TTTNTCTTCT TTCTCCCCAA AAGAAGAAAC      240
CTCGAGAAAG AGTAGATGAT AGTACAGGAA CTGTTATTTC CGATGTTGAA GAAGATGCCN      300
GGGAAGTAAG CAGAGAGAGT ATGTGGGACC TTTCTGTGA AACTGTGAGA GAGCAGCTTA      360
CAAACAGCAT CAGAAAACAG TGGAGAATTT TGAAAAGTCA TGAGAAAAG CTTGATAACC      420
AAGTTTCAAA GGTACACCTG GAAGGTTTTA ATGATGAAGA TGTAATCTCA CGACAAGACC      480
ATGAACAAGA AACTGAAA

```

## (2) INFORMATION FOR SEQ ID NO:652:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAATCTTCTT TTCTCTATAA ATTTGCCTAC TATTGAAGAT TCTTCAGAGG AAGAAGAATT      60
GAGAGAGGAA GAAGAATTAT TAAAGGAGCA AGAAAAGCAG AGGGAAATAG AACAGCAACA      120
AAGAAAGAGT TCTAGTAAAA AATCAAAGAA AGACAAAGAT GAACTTCGAG CTCAGAGAAG      180
AAGGGAAAGG CCAAAGACTC GAG

```

## (2) INFORMATION FOR SEQ ID NO:653:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GGAAAGAAAN GGACAAACCT ATAAATTAAC TCAACCTATA TCTCCCTTGA AAATACTTTC      60
AGGCTCCACC AAAACGTAGA ACTGAAAGCA TGTATTTTGG AAGAAAGAGA TACATTTTGT      120
ATGCTTTCTT TTCCTTTTGT AGATTCCAG TTTATTTTCT AAGACTGCAA AGATCACTTT      180
GTCACCAGCC CTGGGACCTG AGACCAAGGG GGTGTCTTGT GGGCAGTGAT GGGGNCCTCG      240
AG

```

## (2) INFORMATION FOR SEQ ID NO:654:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```
GATTTCGCCT TCATGGCCTA GGGAGGAGAA GAAGGGGGAG AAATCACAAA GAGATTGGGG    60
AGGAGATGAA GTAGCAGGGC TCAGCGATTC TTCAATTCC AGTGCACACC CAATAGTGTG    120
TTGGAAGAAT GCACACTGTT CGGGATTGTG GGGAGAATTG TCCCATGACA AAGGAGGCAG    180
GGTTATGCTT GTTATAGTCC AATAAGCCGT GCCAGTCAAA CAAGAACCCA CACTCCTCGA    240
G                                                                    241
```

(2) INFORMATION FOR SEQ ID NO:655:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 278 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```
GAATTCGCCC TTCATGGCCT AGTGGTGAGA CTGAGCAGAT TTAATTAATG TCTGTTATGT    60
TCAGGGCACA AGGGTGAGCT CTTCCGAGGG GCTGATGCAC TGGGTGTGGA GCTGAGCAGA    120
GAGGCCTAAC CAGGATCAGG CAGGAGGGCA GGGATGGTGG CAGCCATAGG AGGGCAGGGT    180
AGGGTAGGGC CTCTGAGGAG GAGGGAAAAA GTGAAGGAGA GGCTTTGGAC CTGGTGACAG    240
AGTGATCAGA TGACAGAGGG GTTTTGGGA GACTCGAG                                278
```

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```
GGAAGGAGAA GTGGAGAAGA AATCAGTCAG CCGCAGTGAA GAGCTCAGAA AAGAAGCAAG    60
ACAATTAAAA CGGGAACCTCT TAGCAGCAAA ACAAAAAAAA GTAGAAAATG CAGCAAAACA    120
AGCAGAAAAA AAGAAGTGAA GAGGAAGAAG CCCCTCCAGA TGGTGCTGTT GCCGAATACA    180
GAAGAGAAAA GCAAAAGTAT GAAGCTTTGA GGAAGCAACT CGAG                                224
```

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 253 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

ATACAGTAAT CAAAGTAAGT AATATTTCAA TCCAATATTT TAAAAATCA GAATTAATGC	60
AAAAAAACC ATGATGAACA AAATATTTAA ATTTAAATA AAGACAGGAT TAGTATTACT	120
GAGTTTCTCT TTTGTCCCAG GCTCTAATAT GGCTTGGCAT GGGGCAGAAC ATTACAACAT	180
ACCAGTCGTG TCATGGTGCC CAAGGCTCCA CAGACCTCAG TGGCTCCCTG CTGCCTGCCA	240
CAGCAATCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

GAATTCGGCC TTCATGCACT TTTGAGCATC AGTTTCTTTT CACTCCTTCT TCATGTGCTA	60
TTCTTCCAA ATCTTTCCCA CCTTCTCCT TCTCTCCTCT GTCTTTTCTC CTCCCTCTTC	120
TGTTGTCTC TGGTTTCCAT CTGTTTCTCC TTCTCCTTCC CCATTCTCA CTATCCTCTC	180
TTCTGTCTCC TCACTTACTT CTCCATCCCT CCTCTCTCCA GCCCTCTCTC CCCCCTGTCT	240
CGAG	244

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC TTCAGCCTAG TCTCAAACCT CAAGCAAACC TCCTGCAATC CCAGCGCTTT	60
AGGAGGCCGC TCGAG	75

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GCNTTCATGG CCTAAGTTCA CCTTTAANTC TTTCATGACC ATTTCCAGAN GCCCTTACCG	60
TGGGCTATCT TAGCTTGATG TGCTAATCAA GTTCCCCCTA ATTTGACATA CTAGAATCTA	120
ATACTAGAGG CAGCATGACA TTATTAAGGG GGAGGAGGTT GAGAAGCACT AACCTCGAAG	180

TTAGAATTTT	TGTC	TCCAGTCTG	CTAATTAGCT	TTCTG	AGACAAAATA	240
CTTTTTCTGT	GCCTTCTGGG	GGTCAAATTC	GATTTTTAAG	ATTCTCTCAG	TTGGAAGAAA	300
TCTAACTAAA	AATATACTTA	AAATAATTCT	TTGGTAGTAT	ATTATTTTGA	AATTTGGTCC	360
AGAATCCTAT	TTGTTTATTC	CTGTAGTATA	CATACATCTG	TAGTTACCCA	GCAAGCGCGC	420
TCCCTATAGT	GAGTCGTATT	AATTTACAGAG				480

## (2) INFORMATION FOR SEQ ID NO:661:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

GAATTCGGCC	TTCATGGCCT	AGAGAAAAAA	AATTAGAGTG	ATTTCAGGAC	TCAAAGGAAG	60
AGCCTTGCAA	AGAGTTGGGA	GGATTAAACT	CTATGGATT	AAGCTCTGCC	TGCAAAATAA	120
CATCGTGGG	AATTTAGACA	CAAATTAGGA	ATATTCTGGA	ATTCATTTAG	CAGCAAATCT	180
CCTGACTAGT	TGTCAAATGG	AGCTGTTCTA	ATTGGCCTGT	TCTAAATGGG	CCTGTCTCTAA	240
TTGCAGAAAT	ATTGCAGAAT	ATGTTTTTAG	TAAGCTCTCT	ATAGAAAGTC	ACCTCTGAGT	300
TGCTCAGCAT	TTAGATTCAA	ATATTCAAAT	GTTTTTTAAA	AATGCCAGCA	TATCAATTAT	360
ATTTGAAGAA	CAGTATAGAG	GCTTGAAACA	TGCCAAACAG	CAGGGAACAG	GAATAACCTT	420
TAATGAGTGC	CTACTCTGGT	GCAGGGTCCT	TTACACACAT	TACATTATGT	GATCTTCACA	480
ACAAACCGAC	TCGAG					495

## (2) INFORMATION FOR SEQ ID NO:662:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	ACGAGGAAAG	60
GTCAGAGAGA	TGCGAAGTTT	CTGGCTTTGA	AGATGGGGAA	AGGTCTCCAG	CCAAGTGTGA	120
GCAGCCTCTA	AGAGTCAGAG	AAGCCAAGGA	ACAGCTTCTA	CTCTAGAGCC	TCCAGAAGGA	180
TGGCAGCTCT	GCTGATGTCT	GGCCTTATCT	CAGGGAGCCC	TGTTGGATT	TGAGCTGGTG	240
GAAGTGTGAG	ATAATGACTG	TGGTGTTTAA	GCCAGTAAGT	TGGTGTAAAT	TGTTAATGTG	300
ACTGCAGAAA	CCCAATAGAC	CGAGTGCGTG	TTGGGCTCTC	CCTGTACAAA	GGCAGAGGGA	360
CAGCAAGTGT	GAGCAGGCCC	TGCTGTGAGG	TAGAGGGCAT	CCTCTGAAGT	GTGTGGGGAA	420
GGGGGAGCCT	CACATGAGCC	CAGGGCTGCC	ACATGTTTCA	TCTGAGCGCT	CGAG	474

## (2) INFORMATION FOR SEQ ID NO:663:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

GAATTCGGCC	TTCATGGCCT	ACTCTACTCG	TGCGGTGCTT	CTTCTCCTTG	GCATACAGCT	60
CACAGCTCTT	TGGCCTATAG	CAGCTGTGGA	AATTTATACC	TCCCGGGTGC	TGGAGGCTGT	120
TAATGGGACA	GATGCTCGGT	TAAAATGCAC	TTTCTCCAGC	TTTGCCCTTG	TGGGTGATGC	180
TCTAACAGTG	ACCTGGAATT	TTCTCCTCT	AGACGGGGGA	CCTGAGCAGT	TTGTATTCTA	240
CTACCACATA	GATCCCTTCC	AACCCATGAG	TGGGCGGTTT	AAGGACCGGG	TGTCTTGGGA	300
TGGAATCCT	GAGCGGTACG	ATGCCTCCAT	CCTTCTCTGG	AAACTGCAGT	CAACCTCGAG	360

## (2) INFORMATION FOR SEQ ID NO:664:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC	TTCATGGCCT	ACCCTGTGAA	AGTGGTGCCT	GACTGTCTGA	GGAGGGACGT	60
GGGCTAGAGA	GTTCTCCCTG	GGCTCAGGAA	GGATAGCTTG	GTTGGTAAGG	GAATGCAGTG	120
TGGATGACAC	TGAGGCTGCC	AGAGGTCTTG	GGTTGGCTGC	TCCTAGGTGG	CTTGATGAAA	180
ATGGGAGGAC	CAGAAGAATT	GGAAGTTGCA	GCCAACTGAT	GGCTGCTACT	GAAGATTCTT	240
GACAGGAAAT	AGAAAATAGG	ATGTAAGACC	CTCCTCTCCT	CCTTCTGGCT	CCCAATATTT	300
TCTGGTGATT	CCCATTTGGT	GATGCTAACA	GGAATCACC	TGGCAAGGGA	GCTTGAGACA	360
TGTAGTTTGA	GAGCTCGAG					379

## (2) INFORMATION FOR SEQ ID NO:665:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 206 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC	TTCATGGCCT	AATCACACAC	CAACAAAACA	CATTTATTTT	GTAATTTATT	60
TTCTCCTGAT	ATTTATGCTA	GAAAAGTCCA	TTTGTATTTT	TTTTACTATG	GCATGTTTTT	120
ATAGGTTCTG	TCTTATTTT	ATTAAGTTCA	TGTTTTTACT	CTTCATTATC	AGGAGTTCTT	180
ACCATATTTT	ATTNGCAAGC	CTCGAG				206

## (2) INFORMATION FOR SEQ ID NO:666:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GCCGATGAGG	ACCAAGATNA	AAACAGTGCT	CAAAAGTCGT	GGCCGCCAC	CTACAGANCC	60
GCTGCCCCGAC	GGGTGGATCA	TGACATTCCA	TAACTCTGGA	GTCCCGGTGT	ACCTACACAG	120

AGAGTCTCGG	CACCT GGTCCAGGCC	ATACTTCTTG	GGAAC	GCATACGGAA	180
ACACGACCCT	CCTCTGAGTA	GCATCCCTTG	TCTGCATTAT	AAGAAAATGA	240
GGAACGGGAG	CAAAGCAGTG	ACCTCACCCC	TAGTGGGGAT	GTGTCCCCCG	300
GAGCCGATCT	GCAGAGCTGG	AGTTTCCCCT	GGATGAGCCT	GACTCTATGG	360
GGGGCCCCCG	GACGAGAAAG	ACCCACTAGG	GGCTGAGGCA	GCCCCGCGG	420
GGTGAAGGCC	AAAGTCGAGG	TGTGCAAAGA	TGAATCCCTT	GATCTCGAG	469

## (2) INFORMATION FOR SEQ ID NO:667:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

GAATTCGGCC	TTCATGGCCT	ACACATACAA	CAAACCGAAG	CTTCCGAAC	CCGAGAGGA	60
ACTTCTCCAG	CAATTAAAC	GGGAGGAGGT	GTCCCCAACA	GGGAGTTTCA	GTGCCCCACTA	120
CTTGTCGATG	TTTCTCTTAA	CTGCTGCCTG	CTTATTTTTC	CTAATACTGG	GACTGACTTA	180
CCTAGGAATG	AGAGGGACAG	GAGTATCTGA	GGATGGAGAA	CTCAGCATAG	AAAACCCCTT	240
TGGTGAAACA	TTTGAAAAAA	TACAAGAAAG	TGAAAAAACT	CTTATGATGA	ACACATTATA	300
TAAGCTTCAT	GATCGATTAA	CACAGCTCGA	G			331

## (2) INFORMATION FOR SEQ ID NO:668:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

GAATTCGGCC	TTCATGGCCT	AGGACCCAAA	GTCCGCGTGG	AACCGCGATA	GGGATCTGTC	60
AGGGCCCCCG	GCCGGGTCCA	GCTTGGTGGT	TGCGGTAGTG	AGAGGCCTCC	GCTGGTTGCC	120
AGGCTTGGTC	TAGAGGTGGA	GCACAGTGAA	AGAATTCAAG	ATGCCACCTA	ATATAAACTG	180
GAAAGAAATA	ATGAAAGTTG	ACCCAGATGA	CCTGCCCCGT	CAAGAAGAAC	TGGCAGATAA	240
TTTATTGATT	TCCTTATCCA	AGGTGGAAGT	AAATGAGCTA	AAAAGTGAAA	AGCAAGAAAA	300
TGTGATACAC	CTTTTCAGAA	TTACTCAGTC	ACTAATGAAG	ATGAAAGCTC	AAGAAGTGGA	360
GCTGGCTTTG	GAAGAAGTAG	AAAAAGCTGG	AGAAGAACAA	GCAAAATTG	AAAATCAATT	420
AAAAACTAAA	GTAATGAAAC	TGAAAATGA	ACTGGAGATG	GCGCACTCGA	G	471

## (2) INFORMATION FOR SEQ ID NO:669:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGCTTCATGGCCT AGAGAGGTTG CTCATTCGTC A      TGCT GCCCACCCTC      60
CACCCCTGCA TGGCAGAAAC TGTGCAGGGG ACGAGGCCAA GGAATCAGGA GACCCAGAGG      120
CAGGGGTGGC CCGGAGACGG TGAAGAAACC AAGACGCAGA GAGGCCAAGC CCCTTGCCTT      180
GGGTACACA GCCAAAGGAG GCAGAGCCAG AACTCACAAC CAGATCCAGA GGCAACAGGG      240
ACATGGCCAC CTGGGACGAA AAGGCAGTCA CCCGCAGGGC CAAGGTGGCT CCCGCTGAGA      300
GGATGAGCAA GTTCTTAAGG CACTTCACGG TCGTGGGAGA CGACTACCAT GCCTGGAACA      360
TCAACTACAA GAAACGGGAG TATCTCGAG                                389

```

## (2) INFORMATION FOR SEQ ID NO:670:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```

GAATTCGGCC TTCATGGCCT AGTGTCAAA AATATAGAAA GAAAAGAACA AACAAAAAAA      60
GAGACAAAGG TGGAAATACCT TTTTGAAATA AAAGAGAGCT AGCAATGCAG TACATGGTCC      120
TTGCCCTATT ACTATCCATC CTCATCCTAG CAATAATCCC CATCCTCCAT ATATCCATAC      180
AACAAAGCAT AATATTTGCG CCACTCGAG                                209

```

## (2) INFORMATION FOR SEQ ID NO:671:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 271 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```

GAGTTCATTC AAGATATTTT TCACTTGCTG TTCAGGAGCT TTGATGTGCG TCACCATTC      60
TGGCATGTTT ACGCTGTTC TGTGCAGGTA TTTCAGGAAG ACGTCTGCAT TCCTCCGAGC      120
AAGGGTGCAA GCCTTCAGGA ATGCCTCCTT CTGCTCCAGG TGCTTGCTGA TCATGGGCGT      180
CACGTGGTCC GTCTCAGAGT TTGGGCCAG CTTATCCGCC CCGCCACACC AGTCTTCTTC      240
TCTCTTGAC TCCCTGTTC AGGCTCTCGA G                                271

```

## (2) INFORMATION FOR SEQ ID NO:672:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```

GAATTCGGCC TTCATGGCCT AAGATAAATT TGACAAAGTT AACTGAAATT TATCTGGTCC      60
ATTTTATTCA TGCTACTAAG ATGGGAATCT TTAAACACAA GGGTCAGCAA GCCTTGGCCC      120
ATGGATTGGC CACCTGTTAC GTAAATAAAG TTTCTTTGAA ACAAGCCTAC ACTCATTAT      180
TTATGTTTTG TCTGTGGTTG CTTTCACAA CTGCAGAGTT GTATGGCTTG CAAGTCTAAA      240

```

AACATTTACT	GCCCT CTAAGAAAAA GTTAAGACAC CTAGT	GGCCTTTTGG	300
GAAAAAACAA ATCACTAACT CATAATCATT TATATCCATT ATTTTCTGCA TAAATGTAAT			360
GCTATTGTAC AGGGTACTCG AG			382

## (2) INFORMATION FOR SEQ ID NO:673:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GAATTCGGCC TTCATGCCTA CCAAATTTGT CTAAGCACTG GCCAGTCTGT TGTGGGCATT	60
GTTTTCTACA ACCAATCTG GGTTTTTTTC TTCTTTCTTT AAACATAGAG GTACCACCAC	120
AAGGGATGCC CTACTCTCTC GCAGCTCTTG AAAGCATCTG TTTGAGGGAA AGGTCTCTGG	180
GCAAGCAAGT GGTATTGTG ATTGCTTGCT TCCCTTTTTC CACCTGGGAC ATTGCAATCA	240
TAAAATAACA GTAAATTCCA AACCTCAAAA ACTATTATGG CCTGAGCACA GCTGAAATCT	300
AGCAGAGTTT AACTCTTCTG CCTCCATGTC TGCACTTAT AATTCAGGTT CTGCTGTTGG	360
CTTCAGAAC A TGAGCAGAAG AATCGTTTTA TGCTAGTTAT TGCATTCATG GTTGAAACTC	420
AACTTAGGGA AAGGGTTCCA ATGTATTAAG CAATGGGCTG CTTCTCCCA ATCCTCCCTA	480
ACAATTTGTT GTGTGGACTT CTCATCTAAA AGGTAGTGA CTCGAG	526

## (2) INFORMATION FOR SEQ ID NO:674:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GAATTGCTTC TCAATTTACC CGAGATTTCA TTCGAGATTC AGGTGTTGTC TCACTTATTG	60
AAACCTTGCT TAATTATCCA TCCTCTAGAG TTAGGACAAG TTTTGTGGAA AATATGATTG	120
ACTGGCTCGA G	131

## (2) INFORMATION FOR SEQ ID NO:675:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC TTCATGGCCT ACCTAATCTT CCTTTTCTTT TTAGCATTTT TGGGCTTTTC	60
AAAGCAATCT CCCCACAAAA AGAATCATTT GGTTTTGGAA AAGAAAACAG AATCAGCAAC	120
TTTTCCGGTG TGTGGTGAAG ATGTCACGTG TGTGGAATAC GCTATCTCCT GGCTACAAGA	180
CCTGATTGAA AAAGAACAGT GTCCTTACAC CAGTGAAGAT GAGTGATCA AAGACTTTGA	240
TGAAAAGGAG TATCAGGAGT TGAATGAGCT GCAGAAGAAG TTAAATATTA ACATTTCCCT	300

GGACCAT GACCTTTGA TTAAGGTTTT GGAATTAAC AGAAGACTCG AG

352

## (2) INFORMATION FOR SEQ ID NO:676:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAATTCGGCC TTCATGGCCT AAACCCATAA AACAGGAATT CCTTATAATC CTAGAGGACA	60
AGGCATTATA GAATGGGCAC ATCAAACATT ACAACGAATG TTGAAAAGAC AAAAAGGGGG	120
TATAGGAGGC CAACTACCAC CTCAATCAAA ACTACATTTA GCCTTATTTA CTTTAAATTT	180
TTTGACTCCT GGTACGGATG GTAAGACTCC AGCAGAAAGA CATTGGCAAG TGTTAGAGGA	240
AAAGACTCGA G	251

## (2) INFORMATION FOR SEQ ID NO:677:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

GGGCATTGTC AGTTTTCTTC CCTGCTGCAT GTAATGTCTC AGAATCAACA TTCTTTTAAA	60
ATCTAGACTA TATTTTGAGG CAATGAATTA CTTATATTCA ACTTAGGCTT GTTTTGACAT	120
TCAGTAGAAC TTTAAGTTCA ATCTAAAGGC TTCAGTCCAC ATTTTTTTAT ACGTTGTATT	180
TTAAAAACGT TTGAAAGGAG TCTTACACCT GTATCATGAA AACTGAATCC TTTTGAAATA	240
CCACTATATG AAGAGAGAGA TGAAATTTAG TGAACAGAAT TGAAAAGGTG CTCATAATT	300
CACTATGCAA ACTTACCCCA GTCAACTCGA G	331

## (2) INFORMATION FOR SEQ ID NO:678:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

GAATTGAACA ATGCTGACAG GCTGGTANTC CTGCCCTGAA GCAACTCACA GACTCATAGT	60
TATAGAACAT CTTTATCTTT AGTTAATCCA TNGCACAGCA TTGGCCAAGG GTCAATACCT	120
TGTAATAAGC ATGTGTGTAT TGGTCAGGGT TCTACAGAGA GACAGATCAA TAGGAGCTAT	180
CGATAGATAT AGACATATGA GAGGGGGTTT GTTAGGGGAA TTAGCTCACT TGATTACAGA	240
GGTTGAGAAG TCGTCTCTCG AG	262

## (2) INFORMATION FOR SEQ ID NO:679:



- (i) S CE CHARACTERISTICS:  
 (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

```
GAATTCGGCC TTCATGGCCT AGCAGCCCGA GGCCTTGAGG CCACTGCCTC CCCAGGGCTC      60
CTGAAGCCAA AGAATGGAAG TGGTGAGCTG AGCTACGGAG AAGTGATGGG TCCCTTGGAG      120
AAGCCTGGTG GAAGGCACAA ATGCCGCTTC TGTGCCAAAG TATTTGGCAG TGACAGTGCC      180
CTGCAGATCC ACCTTCGTTC CCACACGGGT GAGAGGCCCT ATAAGTGCAA TGTCTGTGGA      240
AACCGTTTTA CCACCCGTGG CAACCTCAA GTGCATTTC ACCGGCATCG TGAGAAGTAC      300
CCACATGTGC AGATGAACCC ACACCCAGTA CTCGAG                                336
```

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 389 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

```
GAATTCGGCC TTCATGGCCT AAATTAAAGA TGATTTTTTT AATGTGAATA AAGTTATGTT      60
CTGATAGTTT GTACAGAAAA AATAAATGG ATGCCCATGT TTTATTGCTA TTACTAAATG      120
TCAAGATTGT ATGCTATTAT GTCTTGTAAT TTTCTTTTGT TGGTGTAAT ATGGAAATGC      180
CACATTGGTT AAGTGCCATC ATTTGTAATG CAATGTGTCA CTTGAAAAGA GATTGAAGA      240
AACTGACAAC TTCAAAAACA AATGAGAAGC CCAAGGAAC GTGAGCAATT AAAAGCAAAC      300
CGCGACACCC TTTGTCTCCA CCACACATAG TGTACTTTGG AAGCACAACG TCCAGGCTGG      360
TACCGCAGCG CCATGCCCAT TCCTCGCCG                                389
```

(2) INFORMATION FOR SEQ ID NO:681:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

```
GATTTCTCTG TTGACTTCTG CAGTGAACCA CCTCAAAGCC AATGTTAAGT CAGCTGCAGA      60
CTTGATTAGC CTGCCTACCA CTGTAGAGGG ACTTCAGAAG AGTGTAGCTT CCATTGGCAA      120
TACTTTAAAC AGCGTCCATC TTGCTGTGGA AGCACTACAG AAAACTGTGG ATGAACACAA      180
GAAAACGATG GAATTACTGC AGAGTGATAT GAATCAGCAC TTCTTGAAGG AGACTCCTGG      240
AAGCAACCAG ATCATTCCGT CACCTTCAGC CACATCAGAA CTTGACAATA AAACCCACAG      300
TGAGAATTTG AAACAGGATA TCCTGTACCT TCACAACTCT TTAGAGGAGG TAAACAGTGC      360
CCTAGTGGGG TACCAGAGAC AGAATGATCT TAAACTCGAG                                400
```

(2) INFORMATION FOR SEQ ID NO:682:

- (i) UENCE CHARACTERISTICS:  
 (A) LENGTH: 311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA.
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GGAGATCGAA AATTGAAACT CTCAAAGAGA CAACAAATAG CATGGTAGAA TCAATTAAAC      60
ACTGCATTGT GTTGCTGCAG ATTGCCAAAA GTACTATTAA TCCCGTAGAT GCAATATATC     120
AACCTAGTCC TTTGGAACTT GTGATCAGCA CAATGCCTTC CCAGACTGTG TTACCTCCAG      180
AACCTGTTCA GTTGTGTAAG TCAGAGCAGC GTCCATCTTC CCTACCAGTT GGACCTGTGT      240
TGGCTACCTT GGGACATCAT CAGACTCCTA CACCAAATAG TACAGGCAGT GGCCATTAC      300
CACAACTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:683:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GTGAGGGGTT CCGTGACTGA GGTCTGAGC TGCTGTTGAT GTGCTATACC TCCTTCAATT      60
CTCAGTCTTC AAAGGGGAAA ACAACTGCAG AGGATGGGAA ATGCTATACT GCCATGCCTG     120
GAAACACCCA CAGGAAAATT ACCAGTTTTC AGCTTGCTCA ACTGCAAGAA AACTGAAGG      180
AGACAGAAGC AGCCATGGAA AAATTAATCA ACAGAGTGGG ACCTAATGGT GAGAGAGCAC      240
AGACTGTGAC TTCTGACCAA GAGAAACGGT TGCTACATCA GCTCCGAGAA ATCACCAGAG      300
GTCTCGAG                                     308

```

(2) INFORMATION FOR SEQ ID NO:684:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GCTCCGGACA ATGAAACATA ACCAATACTA CCAATCAATA CTCATCATTA ATAATCATAA      60
TGGCTATAGC AATAAACTA GGAATGGCCC CCTTTCACCT CTGAGTCCCA GAGGTTACCC     120
AAGGCACCCC TCTGACATCC GGCCTGCTTC TTCTCACATG ACAAAAATA GCCCCATCT      180
CAATCATATA CCAAATCTCT CCCTCACTAA ACGTAAGCCT TCTCCTCACT CTCTCAATCT      240
TATCCATCAT AGCAGGCAGT TGAGGTGGAT TAAACCAAAC CCAGCTACGC AAAATCTTAG      300
CATACTCCTC AATTACCCAC ATAGGATGAA TAATAGCAGT TCTACCGTAC AACCCTGACA      360
TAACCATCTT TAATTTAACT ATTTATATTA TCCTAACTAC TACCGCATTC CTACTACTCA      420
ACTTAACTC CAGCACCACG GGCTCGAG                                     448

```

(2) INFORMATION FOR SEQ ID NO:685:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 312 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GTTGACAAAC AAGCTCAAGC TCGGATAAA ATGAAGGAGC AGGAAGACCT GGCCAAGGTG      60
GTATCTAAAG AAGAATCAAT TGTTCATCA TTACGATTAG CCTATAAGGA TCTTGAAATT      120
CAAATGAAGA AAGACGAAAA GATGAACATT AGTGGCAAAA AAAATGTTGA CTCAGACAGA      180
CTCGGCATGG GATTTGGAAA TTGCAGAAGT GTTATTTCAC ATTCAGTGAC TTCAGATATG      240
CAGACCATAG AGCAGGAATC ACCCATTATG GCAAAACCAA GAAAAAGTA TAATGATGAC      300
AGTGAACTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:686:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GTAATGGCAC AATGGATTCA AATGGGACAT TTGTTAATGT AACAATGAGC ACATTTAACT      60
GGAAGGATTA CATTGGAGAT GACAGTCACT TTTATGTTTT GGATGGGCAA AAAGACCCCT      120
TACTCTGTGG AAATGGCTCA GATGCAGGCC AGTGTCCAGA AGGATACATC TGTGTGAAGG      180
CTGGTCGAAA CCCCAACTAT GGCTACACAA GCTTTGACAC CTTTAGCTGG GCTTTCCTGT      240
CTCTATTTCT ACTCATTCCT CGAG                                     264

```

(2) INFORMATION FOR SEQ ID NO:687:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 277 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GGGAACAGCA GTTCCTATGG CTTTTTTTTT TTTTTTCTG TGTATGAGCA ATTCGACTCA      60
GTGGGATGAT ATTTTCTTTT ATAATCATT AATGTTTGCG ATACCGTGTA CTCAAATATT      120
CAATGTCAGC TGTCAGCTAC CATTGGGATC CATCCACAG ACCATCAAAA TGTACTTTTG      180
GGCTGAATTA GTCCTATGCC AAGACTTGTG GGTGGATCCA GCAGCAGTTG GGAACCAAGT      240
GCCAGGCCTG GTGTATGTGC TCACGAACAC ACTCGAG                                     277

```

(2) INFORMATION FOR SEQ ID NO:688:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 393 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

GAATTCGGCC	TTCATGGCCT	AAATAGTTTA	GTTCTCTGGT	GCAATTTGAA	GTATATCTTA	60
TAGTCACTTT	TAGTAATGTG	TGTTACTTCC	CTGTAAGGAA	TAGCAATGTT	ATACTTCTCC	120
TTTTGCAGTG	AAGAAATTGA	GATGTAGAAA	GGAAGAGACC	TGCCCAAGGT	CAAAGAGCAA	180
GGCAGTGGAA	AGCCTGAGAT	TAGACTTGTG	GTCTTTTAGA	TTTTTCATCT	GTTGTTCAAC	240
ACTGAGGAGC	CAGCTTTCTG	TTTGTGGAG	ACAGTTCAGC	CTAATGGAAT	TTTCTCTGCC	300
AGATGTCCAC	ATTGTGTTAG	GTGATGATTC	TAACCATCCT	CTAATACCCA	TTCTCTCCCA	360
AAGTGGCCCT	TAGTTCCCC	ACCAGAACTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

GAATTCGGCC	TTCATGGCCT	ACTGTTCTGC	TCCTCCCAGA	CAGAGCCTTT	CCCTCAGCCC	60
AGGGGGTCAG	GGGGTGAGGG	AAAGGCTCTG	TCTGGGAGGA	GCAGAACAGC	AGAAGAGAGG	120
AGGAGGCAGG	GAGTTACAGG	AACCTGGGGT	ACCAGGCTGC	TGGGAAGATG	CAGATTATGA	180
CAGAGCTTGC	ACGATGCTGG	CACCCCATGC	CAACCACTCT	ACGTGGCTTT	CCTCTTCGGA	240
GAGGTGGTGG	GCTCCCTTCT	TCACTGTGCC	CTCCCTCCTC	TGGCCACTAG	GGGTGGGAAA	300
TACGAGTGAG	AATCCTTCCA	GATTTACTTC	CGCCAATCCA	GAGGTACAGG	CTTTTAGGCA	360
AGGGGCAGAG	AACTGCCCAA	TTTGTGCTT	CATGGCCTAG	GGGTGGGGTT	CCTTAGGAGC	420
TGAAAAGTTG	AACAAGGTGT	GTGAGCAGGT	GGCTTGTTC	TTGTTTCAA	GCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

GAATTCGGCC	ATCATGGGCT	AAGACGTGGT	ANTGACATGC	CTGTAGACCC	AAGTATTTGG	60
GAGGCTGAGG	TGAGAGGTTT	GCTTGAGCCC	TGGAAGTCGA	GGCTTCAGTG	AGGCAAGATC	120
ACACCACTGC	ACTCCAGCCT	GGGAGAGCAA	GACCCTGTCT	CCAAAACCAA	AAAAAAAGGG	180
AAAAAAGTAA	ATGTTATAGA	TACTTGCTAA	GGGCTTTGTA	TATACTTATT	ATTGTTATTT	240
CTCAGCACGT	ATGTAGCAGA	TGAGGAAATG	AAGGCTAAAG	GTCATATATN	TACAAAGTGG	300
GGAGGTCAGA	CTTTGAAACC	ACAACCTGAC	TGTGGAGCCA	CTTCAGTATA	CTCTCTCCCC	360
ATAAGAAAGT	TCCAATAGAA	AAAAAATGCT	ACTTAAGTAG	GGAAATCACA	AAATAAGTGC	420
CAATGAACAA	TAAATGTTCA	ACCTCACTAC	AGTTAAATG	TATATTAAAG	CAAGAGTTGA	480
GATGACACTT	TTCTTATAA	AACAGACAGG	GATTGAGGGA	CATTGGGACT	CTAATGCTGC	540
TGTAAGACA	TGAATAAATA	CATACCATCT	CTGGCAATCA	ATACCAGAAG	ATCTCGAG	598

(2) INFORMATION FOR SEQ ID NO:691:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 406 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```
GAATTCGGCC TTCATGGCCT AGTTCTCCCT TCCATTCTGC CCTGTATCT TTGCAGTCAT    60
TGTATACAGC AGATTCTAGA AAGTGTTAAT CATTGTCACC TAAATGGCAT AGTTCACAGG    120
GACCTGAAGG TCAGTATATG GAGTCCATAA ATCTGAATCA AAGCAGTTT ATTTTTTTT    180
CTGGGGAAAG GGCAGAGGGT GGGTATTTAA AATGGTTCCC TTGCCTTTCC CAACTGTGTT    240
CTAAAATGAG TAAATGATGA AATGATAATG CATGATGCCT CTCCAGTTT GCTCATCTAC    300
AGGCTAAATA TACATCATAG CAAAAGGGA AGAATACTAA AGAATACAAC CTGCTAAGTT    360
TCCAAGCAGT AAACACCTA CAAAAGGGA TTGAGGATCC CTCGAG                      406
```

(2) INFORMATION FOR SEQ ID NO:692:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```
GTCCTGGAAG AATGTGTCCA GCAACCCAAA AACTAATAGA AGAGTCACAG AGAAAAATGA    60
ACGCTTTATT TGAAGGTAGA CGCATCGAAT TTGCAGAAC AATAAATAAA ATGGAGGCTA    120
GGCCTAGAAG ACAATCAATG AAGGAAAAAG AGCATCAGGT GTGCGTAAT GAAGAACAGA    180
AGGCGGAACA AGAAGAGGGT AAGGTGGCTC AGCGAGAGGA AGAGTTGGAG GAGACAGGTA    240
ATCAGCACAA TGATAGACTC GAG                                           263
```

(2) INFORMATION FOR SEQ ID NO:693:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 404 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GCCGCCGAAG AAGCATCGTT AAAGTCTCTC TTCACCCTGC CGTCATGTCT AAGTCAGAGT    60
CTCCTAAAGA GCCCGAACAG CTGAGGAAGC TCTTCATTGG AGGGTTGAGC TTTGAAACAA    120
CTGATGAGAG CCTGAGGAGC CATTTTGAGC AATGGGGAAC GCTCACGGAC TGTGTGGTAA    180
TGAGAGATCC AAACACCAAG CGCTCCAGGG GCTTTGGGTT TGTACATAT GCCACTGTGG    240
AGGAGGTGGA TGCAGCTATG AATGCAAGGC CACACAAGGT GGATGGAAGA GTTGTGGAAC    300
CAAAGAGAGC TGTCTCCAGA GAAGATTCTC AAAGACCAGG TGCCCACTTA ACTGTGAAAA    360
AGATATTTGT TGTTGGCATT AAAGAAGACA CTGAAGTCCT CGAG                      404
```

(2) INFORMATION FOR SEQ ID NO:694:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```
GAATTCGGCC TTTCATGGCC TACTGGATGG CTTTATATCT TTTGCTTTTC TTTTATGGCA      60
GATGCCTTTC CATCGGCATC CCAGCTGTGG CTGGGGACGT TTGGGAAGT GTGTTTGGCT      120
CACTCCGAGA GAACGAGGTC TCAAGAGGAA GTGTGTCTGG CTGCAAAGA TGCCCTGGG      180
CCTGGACAGG ACCCGCTGT GTTCTGCAGC CCTCGACGCA GTGGGTGAGT GAGGCCTTCC      240
TCTCCTGCTG GCTGCCCTGG AGGATTTCAA CATGTCCCAG GATTTGCTCC ACCCTCGAG      299
```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```
GAATTCGGCC TTCATGGCCT ACCTGTTGAA AACTCTCCAA TGACTTCCCA CTCCATCATC      60
CTGTGGGATG GGTCCACCAT GCTGGACCAC AAGGCTCTGC ACAATGCGGC TCCCACCAGC      120
CTCTCCCCTT GGCCAGATT GCTTCCTCCT ACCCCTTCT CTAGCTGCCA GGCCCCCAA      180
CCCCCGCATG GAGCCCTTCA GCAGCTCTGT GAGCTCCCTG CCTGTTGGCA GCCATCACAG      240
CAACGGGCTC TGGTGTGCCC CTTGTTATCC CTGTATTGAG GCCATTATCT GTAATGACAG      300
CCTGGCATAA TTTTATTTTC ACAATTTGTA TAATTATATT CTATTGAGCT AAATGATCAT      360
TATAATCATT ATTAAATATT TATTAAGCAC TTCTAGCTGT GCAAACATAA TAAGATGTGG      420
CCTCAGCTCT TAAAATCTTT CTTCTAATT CCAACCCAAA TACTCGAG      468
```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```
GAATTCGGCC TTTCATGGCCT ACAAGGGAAC ATGTAACTA ACATAACCAA TTGTCAGTTC      60
TCCATGTATT CCTCAAAAGA ATGTCAGAGT AAATGTATTA GAAATACAGT ATCCAGACTG      120
CTAGTCCCTG CCAGAGACAT TCTTACCTCT GCCCTGTGAT AATATTTTAT GCTTGACAGT      180
GAAAACAAGT GTGGCCCTT GCACCGTTA GCTAGAAGTA CAGCCAGATT TCAAGCTAGT      240
GCAGTCACCT CTTCCGTCAT TCTCACAAA TCTGTCAAC CTGGATCTTA GACTTCATCT      300
GAACTCGAG      309
```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs

( PE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTCGGCC	TTCATGGCCT	ACACGGATCC	GTGTGAAGAC	CTACACAGAT	GAGCTGACGC	60
CCATTGAGTC	TGCTGTCTCT	GTGTTCAAGG	CAGCCAACTG	GTATGAAAGG	GAGATCTGGG	120
ACATGTTTGG	AGTCTTCTTT	GCTAACCACC	CTGATCTAAG	AAGGATCCTG	ACAGATTATG	180
GCTTCGAGGG	ACATCCTTTC	CGGAAAGACT	TTCCTCTATC	TGGCTATGTT	GAGTTACGTT	240
ATGATGATGA	AGTGAAGCGG	GTGGTGGCAG	AGCCGGTGGA	GTTGGCCCAA	GAGTTCCGCA	300
AATTTGACCT	GAACAGCCCC	TGGGAGGCTT	TCCCAGTCTA	TCGCCAACCC	CCGGAGAGTC	360
TCAAGCTTGA	AGCCGGAGAC	AAGAAGCCTG	ATGCCAAGTA	GCTCCAGGGA	ACGCATGTGG	420
ATCCTAGACA	GCGCCTTATC	TATGATTGAG	TGCCCATTCT	CGAG		464

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 412 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCGGCC	TTCATGGCCT	ACGGTGGTGA	ACGAGTCTCC	AGCACCATGT	CTGGTTTGTC	60
TGGCCCAACA	GCCCGGCGCG	GCCCTTTTCC	GTTAGCGTTG	CTGCTTTTGT	TCCTGCTCGG	120
CCCCAGATTG	GTCTTGCCA	TCTCCTTCCA	TCTGCCATT	AACTCTCGCA	AGTGCCTCCG	180
TGAGGAGATT	CACAAGGACC	TGCTAGTGAC	TGGCGCGTAC	GAGATCTCCG	ACCACTCTGG	240
GGGCGCTGGC	GGCCTGCGCA	GCCACCTCAA	GATCACAGAT	TCTGCTGGCC	ATATTCTCTA	300
CTCCAAAGAG	GATGCAACCA	AGGGGAAATT	TGCCTTTACC	ACTGAAGATT	ATGACATGTT	360
TGAAGTGTGT	TTTGAGAGCA	AGGGAACAGG	GCGGATACCT	GACCAACTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 139 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

CAGCTCCTGT	GACATTTGAA	GTTTCTTTTA	AAGGGGTTTT	TCTTAATCAA	AGTTTTACAT	60
TTGGTAGCAT	AAGTAGTTCT	TTATGCTTCA	CAGGACATTG	TCTTCAGAGT	AATCTCTCTG	120
CTAAAATGGT	ACATGTGGG					139

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 406 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC	TTCATGGCCT	ATGAAATGAT	ACCTATGGAG	TGTGATTCAT	TTTGCACTGA	60
CCAAAATGAA	TCTGAAGTTG	AACCATCTGT	AAATGCTGAT	CTTAAACAAA	TGAATGAAAA	120
TTCTGTGACA	CACTGTTCTG	AAAATAATAT	GCCGTCTTCT	GATCTTGCGG	ATGAAAAGGT	180
TGAAACTGTT	TCTCAACCAT	CTGAAAGCCC	AAAAGATACC	ATAGATAAAA	CCAAAAAGCC	240
TCGTACTCGA	AGATCTAGAT	TTCATTCTCC	ATCTACAAC	TGGTCACCCA	ACAAAGACAC	300
TCCACAAGAA	AAGAAGCGGC	CCCAGTCTCC	ATCTCCAGA	AGAGAACTG	GGAAAGAAAG	360
CAGGAAGTCT	CAATCACCAT	CTCCTAAGAA	TGAGTCAAAC	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GGCAAGATGG	TGTTGCAGAC	CCAGGTCTTC	ATTTCTCTGT	TGCTCTGGAT	CTCTGGTGCC	60
TACGGGGACA	TCGTGATGAC	CCAGTCTCCA	NACTCCCTGG	CTGTGTCTCT	GGGCGAGAGG	120
GCCACCATCA	ACTGCAAGTC	CAGCCAGAGT	GTTTTGTACA	GCTCCAACAA	TAAGAACTAC	180
TTAGCTTGGT	ACCAGCAGAA	ACCAGGACAG	CCTCCTAAAC	TGCTCATTTA	CTGGGCATCT	240
ACCCGGGAGT	CCGGGGTCCC	TGACCGATTG	AGTGGCAGCG	GGTCTGGGAC	AGATTTCAT	300
CTTCACCATC	AGCAGCCTGC	AGGCTGAAGA	TGTGGCAGTT	TATTACTGTC	AGCAGTATTA	360
TAGTAGTTGG	ACGTTTCGGC	AAGGGACCAA	GGTGGAAATC	AAACGAACTG	TGGCTGCACC	420
ATCTGTCTTC	ATCTTCCCGC	CATCTGATGA	GCAGTTGAAA	TCTGGAACTG	CCTCTGTTGT	480
GTGCCTGCTG	AATAACTCCT	ATCCGCTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCGGCC	TTCATGGCCT	AGGGATGGTC	TTAACAGGGA	ANAGAGAGGG	TGGGGGAGAA	60
AATGTTTTTT	TCTAAGATTT	TCCACAGATG	CTATAGTACT	ATTGACAAAC	TGGGTTAGAG	120
AAGGAGTGTA	CCGCTGTGCT	GTTGGCACGA	ACACCTTCAG	GGACTGGAGC	TGCTTTTATC	180
CTTGGAAGAG	TATTCCCACT	TGAAGCTGAA	AAGTACAGCA	CAGTGCAGCT	TTGGTTCATA	240
TTCAGTCATC	TCAGGAGAAC	TTCAGAAGAG	CTTGAGTAGG	CCAAATGTTG	AAGTTAAGTT	300
TTCCAATAAT	GTGACTTCTT	AAAAGTTTTA	TTAAAGGGGA	GGGGCAAATA	TTGGCAATTA	360
GTTGGCAGTG	GCCTGTTACG	GTTGGGATTG	GTGGGGTGGG	TTAGGTAAT	TGTTTAGTTT	420
ATGATTGCAG	ATAAACTCAT	GCCAGATATT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:703:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```
GAATTCGGCC TTCATGGCCT AGTCCTTTGC TCTACTGTTG AATGGAGGAG GATTTTTTTT    60
TTTTTCCCTC NACACAGGGG TTTTCTTGGA GCTCAAGTTT GGATGACCCC AGACAGTAAG    120
ATAATCTCAT CATGGTAAAG TTAATATGAA ATATGTGGTC TCCAAACAGC CTCTCCACAG    180
GGCCAGGATC AGCAGGTTTG AGTGGATAAT TGGCTTGTGG TCATTTTCTC ATAGGATTTT    240
TCTTTTAGTA GTGGAAACTG TTTTTCAAAT CAAATTTGGA TGCCAACATAT GTGGAACAGA    300
AGTGTGGCTG CTCTGGTGGA AGTGGCAATG GTAGTCCTAG AGTCTCCCTG TCAGCCACAC    360
CCTTTGTCTC CCCCTACCCA AGGGACCCCTG TGGCCTGGAA CCGCAGTGTG AAATGCTATA    420
TAGTGCAATG AAGCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:704:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 437 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```
GAATTCGGCC TTCATGGCCA ACAGCTGAGA TAACGAGGAA ATATTCTGAA ATGGATCCCA    60
AATATTTTCAT CTTAATTTTG TTTTGTGGAC ACCTGAACAA TACATTTTTT TCAAAGACAG    120
AGACAATTAC AACAGAGAAG CAGTCACAGC CTACCTTATT CACATCATCA ATGTCACAGG    180
TATTGGCTAA TTCTCAAAAC ACAACAGGGA ATCCTTTGGG TCAACCAACA CAATTCAGCG    240
ACACTTTTTT TGGACAATCA ATATCACCTG CCAAAGTCAC TGCTGGACAA CCAACACCAG    300
CTGTCTATAC CTCTTCTGAA AAACCAGAAG CACATACTTC TGCTGGACAA CCACTTGCCT    360
ACAACACCAA ACAACCAACA CCAATAGCCA ACACCTCCTC CCAGCAAGCC GTGTTACCT    420
CTGCCAGACT ACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:705:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 403 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```
GAATTCGGCC TTCATGGCCT ACATTCACAT GTTCCCAATC ACTTCCCTCA CACACATATG    60
CTCACTGATT TACACAGCCA TTCGCACTTA TACATACTCG NTCACATTCA CACAGGGTCA    120
CCCATTACAA CACACTCGAC ACATTTACCC TCACATTAC CCACTCACCA TTCCCCTCA    180
CCAGTTCACA TGCACTCACC CAAGCTCACA CTTGACCACG GACACACCCT CAAACATAGG    240
TGCTTACACA CAAGCCNACA CCACTCACC TAGCCATTCA TACTCAGTG CACCTATACC    300
TTCACACACA TCCTCACATA CCCACACAGC TCTACACATA CCCACTTTCT TACACATTCA    360
CACACATACC TATAGACACA TTCAAACACA CCCNACGCTC GAG
```

## (2) INFORMATION FOR SEQ ID NO:706:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC TTCATGGCCT ACTCAGAATC ATAATGAAGT CCAGTCTACC ACACCACCCT      60
TCACTACTGT TGATTCACAG AAAGACTGTA GAAAATTTCC AGTTCCACAG AAGGATGGTA      120
GTGCTTTGGA GGATTCTAGC ACTTCAGGGG CATCTGTTC CAAGTCAAGA CCACATTTAG      180
CTGGGACACA TACTTCTCTT AGACTTCCGC AGGAAGGAAA AGGAACCTGT ATTCTTGTAG      240
GTGGTCATGA AATCACTTCT GGATTAGAAG TAATTTCTTC CCTAAGAGCA ATTCATGGGT      300
TGCAAGTAGA AGTTTGTCTT CTTAATGGCT GTGATTACAT CGTGAGTAAT CGCATGGTGG      360
TGGAAAGGAG GTCTCAATCT GAGATGTTAA ATAGTGTCAA TAAGAACAAG TTCATTGAGC      420
AGATCCAGCA CCTGCAGAGT ATGTTTGAAA GAATATGTGT GATTGTGGAA AAGGACAGAG      480
AAAAACAGG CGAAACTCGA G                                     501

```

## (2) INFORMATION FOR SEQ ID NO:707:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT AGGACAACCTG TGATATTTCA GTTCCTGATT GTAAATACCT      60
CCTAAGCCTG AAGCTTCTGT TACTAGCCAT TGTGAGCTTC AGTTTCTTCA TCTGCAAAAT      120
GGGCATAATA CAATCTATTC TTGCCACATC AAGGGATTGT TATTCCTTTA AAAAAAACCC      180
AATACCAAAG AAGCCTACAA TGTGGCCTT AGCCAAAATT CTGTTGATTT CAACGTTGTT      240
TTATTCACCT CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATACACA CAACACAGAA      300
CATTGCAGAA GTTTTAAANA CAATGGAAAA TAAACCTATT TCTTTGAAA GTGAAGCAAA      360
CTTAAACTCA GATAAGNAA ATATAACCAC CTCAAATCTC GAG                                     403

```

## (2) INFORMATION FOR SEQ ID NO:708:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT AGGTGGGGGG CCTTCTGCAC AAAAAGGGAG TAAGTCCACG      60
CTATACCTGT GCTCAAATAA CAGCGCCATT GATGTCTTGG CANACTGGG ANGACATTCC      120
TTCTGCAAGA CTTGNTGAGC ATATTTCTGA GCTCTCTTTA CATGGTCAGG GTCCACATAA      180
TGCATTTTTT TCATGTCACA TTCTTCAGTA GTATAATTTA ACTTGAGGAT ATAAAGGATC      240
CACACTCCAA ACACAAGCAA TGTACATTG AGGATGTCTT TTAATNACAA GCTGGGCCTT      300

```

CTCATCTTGC TTGCTCG GGTGTACCAT TGCAGGGAGG GCCTCG

348

## (2) INFORMATION FOR SEQ ID NO:709:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GAATTCGGCC TTCATGGCCT ACAGAATTGG CAGCACAAAG AAAACGCCCT CTCCTGACTT      60
GTATTGTGGC AGTCTGAACG CCCCCAGAAA ATTGTGCCAA AGAGTTTAGA AAAATAAATA      120
TACAATAAAA GTAAACACAT ACACACAAAA CAGCAAACTT CAGGTAAC TA TTTGGATTG      180
CAAACAGGAT AATTAAATGT TCAAACAATC TGATAAAATA ACCATTTGGA AACTGCTTGG      240
CCTTCTGTTC TTTTATTGTA TTGACTACAA TCGGGTATTG GTCTCTTGCT GCACTTCAAA      300
AGCAACCAAC AAAACCCTCG AG                                         322

```

## (2) INFORMATION FOR SEQ ID NO:710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGCCATAGAA ACTGCCTCTT TTCATGTGGG ATGAAGACAT      60
CTGTGCCAAG AGTGGCATGA AGACATTTCG AAGTTCTTGT ATCCTGAAGA GAGTAAAGTT      120
CAGTTTGGAT GGCAGCAAGA TGAAATCAGC TATTACACCT GCTGTACACA CACTTCCTCA      180
TCACTGCAGC CATTGTGAAA TTGACAACAT GCGGGTAATT TAAGTGTGTA AGTCCCTAAC      240
CCCNTAACCC TCTAAAAGGT GGATTCCTCT AGTTGGTTTG TAATTGTTCT TTGAAGGCTG      300
TTTATGACTA GAATTTTATA TTTGTTATCT TTGTTAAGGA AAATAGAGGA ANNCAAAGGG      360
ACTCGAG                                         367

```

## (2) INFORMATION FOR SEQ ID NO:711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

```

GAATTCGGCC TTCATGGCCT AGACTTCCAC AGAGACCTAT CTGGAACCTC TGGTTCCTTA      60
CCTCTGCTTC TGTCAGAGCA GCTCTGGGTT TTGGTTTGT ACTATTGTAC ATATTAGGCT      120
TCTATACAAG AAGAACTGGT CCCATTGGTT TAAAAATAAG TTTGAAAATC CTAGAAACAG      180
TGAGAGTCAG AAAAAAAAAA TGTTTTTATA TACATATTCT CTCCTCCACC CCCTTTCTCT      240
CCAGTTGAAA TATGTTGCAG AGCTCTAAAT TTAGGGATGC TTTTGGCGTA TTTCTTATAC      300
ACTCCAGAGG CACTCGAG                                         318

```

## (2) INFORMATION FOR SEQ ID NO:712:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

```

GAATTCGGCC AAAGANGCCT AGGTTTGAAA ACTCTGCTTC CTTTGTGAAT TTGGTGTTAG      60
GAGTTCTTAT TGTTATTCTG CAGCCTTTAC TATTGTCCTT TATTACTGA ACACAGTGAA      120
TACCAAGCAC TGTTTATTAG AGGTTAGGAG TAGGGGCAGG TGATTAAAAA AACAAAAAAG      180
CTAATAATCT CCTCAAGCAA TTTCTGGCCT AATAGAATTA TAGTAGACAG TGAAGTATCT      240
AAACCCAGGG AATCAGATTG AGGCACCATG TCCATCGCCT TGAGAATTAA TAGGCTGCAT      300
TTCTGGGTTT TCCNTTTTTT TTTTTTTTTT GCCCAACTGA GTCTTCTGTG GGAAGTACAT      360
GGAAGTCTTT ATTCTCTTAA ATCATTAAAGT TACTTGACAA TATTCTTGA TTTGGAGAAA      420
CTGGATGTAG GGCCGTATGA AAAAATCATT CGAAATCAGA ATCTCGAG      468

```

## (2) INFORMATION FOR SEQ ID NO:713:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

```

GAATTCGGCC AAAGAGGCCT ATTTTATTGC CAACTTCTG AATAAACTGA AACAGCAGCA      60
ACAGCAGCAA CAACAGCATT CTGAAAATAA GAGAGAAAAC TCTGAAGATC CCGAGGAATC      120
TTGGGAAAAT TTAGTTTCGG ATGAGGATTT TTCTGCACTG TCCTTGGAAT CAGCAAATGT      180
GGAAGATTTG GAACCTGTTA GAAACCTCTT TAGAAAGTTG CAAAGCACAC CTAAGTATCA      240
GAAACTTCTA AAGGAAAGAC AACAGCTACC TGTATTTAAA CATCGGGTCC TCTCGAG      297

```

## (2) INFORMATION FOR SEQ ID NO:714:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC AAAGAGGCCT AGAAATACTG GGAAAAAGGA CACTTACTGT GTGACTTAAA      60
TTGATTAAAG GGTTATTCAG TTCAACTCTC TTGAATCTAA TTAGTATTTT TGTGTCATTT      120
ATTATTATAG GGCACACATT TTTTACATTT GATTAACTT GACCAAAATT AAATGAGCAA      180
ATGTTTATTG CTATGTCCAT TGTTCCTT TCTCTGTAC TGTTAAAAAG AGGAGCCATG      240
GCTTCTGCTT CTCTGTGTA TTCTCCATTA GACCTTCTTC ATCCACCCTC TTCCCATCC      300
CTTTCAGCTC TGAAGGGTCC TCTCGAG      327

```

## (2) INFORMATION FOR SEQ ID NO:715:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 324 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```
GAATTCGGCC AAAGAGGCCT ACTTCTCCAA GCATTCATGT ACATCCTTGG GATCTGCCTC      60
ATCATGGAGC TCATTGGTGG CGTGGTGGCC TTGACCTTCC GGAACCAGAC CATTGACTTC      120
CTGAACGACA ACATTCGAAG AGGAATTGAG AACTACTATG ATGATCTGGA CTTCAAAAAC      180
ATCATGGACT TTGTTAGAAA AAAGTTCAAG TGCTGTGGCG GGGAGGACTA CCGAGATTGG      240
AGCAAGAATC AGTACCACGA CTGCAGTGCC CCTGGACCCC TGGCCTGTGG GGTGCCCTAC      300
ACCTGCTGCA TCAGGAATCT CGAG                                     324
```

(2) INFORMATION FOR SEQ ID NO:716:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 495 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```
GAATTCGGCC AAAGAGGCCT AAAGGGATTT AAAACCTCTG TAGAGGCTGG GCGCGGTGGC      60
TCACACCTGT AATCCAGCA CTTTGGGAGG CCAGGGCGGG CAGATCACCT GAGGTCGGGA      120
GTTCTGAGACC AGCCTGACCA ACGTGGAGAA ACCATGTNTC TCTACTAAAA ATACAAAATT      180
AGCCAGGCGT GGTGGCACAT GCCTGTAATC CCAGCTACTC GGGAGGCTGA GGCAGGAGAA      240
TCACTTGAAC CTGGGANGTG GAGGTTTTGG TGAGCTGAGA TCGTGCCATT GCACTCCAGC      300
CTGGGCAACA AGAGTGANAC TCCATCTCNA AAAAAAAAAA AGAAGAGTTT ACACGAAGTC      360
ACCTCTATTT CAGAAGATAA TCTAGACTCT ATTCCCTCAG AGTCTTTTTT CTCCCCAAAG      420
ATAACACTGT CCTAGGTATT TCCTCATACC CCCAGGCCCA CAGTTCATGG CCCACATGTC      480
CCCTGTAAGC TCGAG                                     495
```

(2) INFORMATION FOR SEQ ID NO:717:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 414 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

```
GAATTCGGCC AAAGAGGCCT ATTTTCTAGA TCATCAGCTA TTGTTAGTGT TTGTGTATGT      60
TATGTGTGGC TCAAGACAAC TTTGCTTCTT TTAATATAGG CAGGGAAGTC AAAAGATTGG      120
ATATCCCTGC TTTATACCAA GAAAGACAAC ACCCCACATT TGCAGTGCCT GAAAACACTA      180
CCAGCCATCT GAAAACATG TGACTTCTAA CTTCTGTTCT TTTTGTAGC AGTGAATCC      240
CACGGTGATA TCTGAGGGAT GTGGTTACCT TTTGGAGGAG GTTGACGGTT TCTAAGGATG      300
ATTCTTCTG AGTGAAATAT TGTCACTGTC ATTGACCTTT TCATTATTTT AACTATTATT      360
ATTCCAGGTT ATCAATACTC TGGCTGACCA TCATCATCGG GGGACTGACT CGAG                                     414
```

## (2) INFORMATION FOR SEQ ID NO:718:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

```

GAATTCGGCC AAAGAGGCCT AGGATGAGAA TGA CTGTGCC TCATTGCATC TTCCTGGCTG      60
CCTGATGGGC AGAAAACCTG GGTCTCTCC CCATTTTAGG AATGGGAAGG CTGAGTCTCT      120
GCGATGAGCC TTCCTCAGGG ATGGTGAGGG GCCGGCCCGG CACTAAGCCC CATTCTCTGA      180
GTTAGGACCT GTAGGAGGGT GGCAGGGGCA AGCGGGGCGG GTGGGTGGCC CAGGCAACTT      240
TGCAACATC TTCCTTTTT CCGGGAGAAG CAAACGCGCT GTGTGGAAAG GCACATTCCG      300
AAGATGGAGT TTCACATCAG CAAGGTCAGC TGGCTCGTGG ATGTTGCAGG GTGGGGTGGG      360
GCAGTGCCAG CTTGCTGGGC CTCAGCTAGG TTAGCAGGAG CTGGGGAGGT GCCCTCGAAG      420
CAGGGATCAG GGCCTCTGGG TATGGTGCAG GCTCGAG                                457

```

## (2) INFORMATION FOR SEQ ID NO:719:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

```

GAATTCGGCC AAAGAGGCCT AACTTGCAGA AGCTGTTTTA TGCAGAGATA AATTGGAAGA      60
ATGGTCAGCC TCTTAAGCTA GCTTATTCGA AGAGGTACTG GAAAAAATAT GGCAAGACT      120
TCAACGACAT ATGCCAAAAC TTTTCCCTT GGAAATCATT GACTAGCATC ACTGAATGTT      180
ATTTCTGTG GAGAACTACT GACAGATATG TGCAACAGAA ATGGTTAAAA GCAGCAGAAA      240
CTGAGAGTAA GCTGAAACAA GTATATATCC CAATTTACAG GAAACCAAAT CCCAACCAAA      300
TATCTACCAG CAATGGCAAG CCTGGTGCTA TGAGTGAAAC CATGAGGTTG ACATTCTGC      360
CTCAGAATCC CCTTGTAAGT CAAGCCTGGG AGGGCTGCTG TGCTACACAG TCTAACCAGT      420
AGTATCTTG GGGCCACCT AATATGCAGT GCAATTTGTT GGCTTTATTG AGAAAAATAT      480
GGAGACCTGA AAATGCCCCC CCGCTCGAG                                509

```

## (2) INFORMATION FOR SEQ ID NO:720:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

GAATTCGGCC AAAGAGGCCT AATGTGTAGT CATCTGGGAT ATGCTAGCAT CACAGTTACC      60
TGGAGTCATC TTGAATATGG AGATGACAGG GACTGATTTT GCAGATTCGT TGAGTTGGTG      120
GGATATGTAA ATATGTTTTT CACCAACAAA TCAGATATTT CTGTTGGGCA GCCAAGTGTA      180
ATAACCATG CTGTAAATGA TCTCTGTCCT CTCCAAATCA CATGATTAAT TAAATTATGT      240

```

GAATGCCTAG TCTCTGCTA GGAATGCTT GTACTTTGGA AATATTGGA CCAAGGACAC 300  
TCTAGAAATT CTCTTGCTCT CCCACCTCAA CAGTGCAACT CGAG 344

## (2) INFORMATION FOR SEQ ID NO:721:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 335 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

CGGTAGAGAG GCAGAAGCAA GAGAGCTACG GTTCAGGTTG GGCACCAGTG ATGCCACTGG 60  
 TTCTCTGCAA GCGCATTCCTA TGACAGAAAC CGTAGCAGAA AACATCGTTA CCAGTATCCT 120  
 GAAGCAGTTC ACTCAGTCTC CAGAGACAGA AGGCATCTGC TGATTCTTTT CCAGACACAA 180  
 AAGTCACTTA CGTGGACAGG AAAGAGCTTC CTGGGGAAAG GAAAACAAAG ACTGAAATAG 240  
 TTGTGGAGTC TAAACTGACT GAGGATGTTG ATGTTCCGA TGAAGCTGGC CTGGACTACC 300  
 TTTAAGCAA GGATAATAAG GAAGTTGGAC TCGAG 335

## (2) INFORMATION FOR SEQ ID NO:722:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

GGAACACACC TGTGGTGCTA GTGTTGGGAT CGGGGGCGTT TAACGCTGGT GGGCAGCAAT 60  
 AAGGGGCAGA TGTGCCGAGA TGCCTGCATC CCCAGGGTGC CGAGGGCAGC AGGAAAAAGT 120  
 GGGGACCTCG GTGCATTGTC CCCACCCCTC CCCTCCCTGG GCTAAAGCAC AATGTTCTCC 180  
 CCGCAGATTA ATGACCCTGC ACCCTCCAGG CCCCTACTCA CATCCTCCCC CAACCGGCTT 240  
 CGGGTCCTCC CACCACACTC TGGTTTTCTA TGCTGTTTGT GTGCAAGTAC AACTGTCTGTA 300  
 GTCATGGCTT TGGGATGGGT TCTGTTTATT AAAATCCTAT TACTCGAG 348

## (2) INFORMATION FOR SEQ ID NO:723:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 275 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

GAATTCGGCC TTCATGGCCT AGTAGTTGTT CCATGCTGTT GTTTTTTGTT TTATCTTTCA 60  
 TTGCCTTTCC CTCTGCAGTC AACATTATGA CCTGGGGACT CCAGCATCCT TCAAGCAAGC 120  
 CATTTCCGAA GAAGGTGAAA AGAAGCCAGG ATGATTGGCA CCTCCTCCTC CTCCTCCTCT 180  
 TCTTCTCTT CCCTTGCCCA GCCCCCTCCT GTGCGTGTGT TTCAGACAAC ACAGGAGCCA 240  
 GCACAGGAGT GGAAAATCCT GTAGCGCAAC TCGAG 275

## (2) INFORMATION FOR SEQ ID NO:724:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GAATTGGCAT CTTTTCATTG CTTTGGCCCT TTGAGAGTTG TTTAGTTTTT TAAAAGTCAG      60
ATAATTTTGG ATTATATTCT AGACCTTTTG AATATTATGT TATAGGACTC TGGAGTCTGT      120
TAAAATCCTT AGGAAGACAT TAATTTTGTG AATTTTAACA GACAGAAGTC CTTGTTATAT      180
TGATCCATTG GTTGTTCTA CACTTGTGCA CCTTGGAGAT GAGTCTGACT TCATATGCAG      240
AATTAGTAT CCCTTCTTG AGCTCCCTCC CCTCTGTGAT CCTCCCCATT CTTCTTTCT      300
CCCAAGAACT TCTCGAG                                     317

```

## (2) INFORMATION FOR SEQ ID NO:725:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AGGGTCAGTG AATCTGCATT ATTACATAAA AAATAAGGCA      60
GAGGAAGCAA TCAAATATGC GTTGTCTCT GGTGAGCCTC AGCAGGGATG ACTTTGAGTT      120
CTGTCTGTCC TTGTCCACA AGGAATTCC TTGTGGAAAA TTGTGAAGGA GGTATGTCGC      180
TTCTTAATC TGTACCTATC TTATTTAGGA ATAAATGGG AGGCAGGTCT GTCTGACATA      240
GTTCCAGTT TGACTTTTCC CCTGACTTAG TGATTTTGAG GTCTCGAG                                     288

```

## (2) INFORMATION FOR SEQ ID NO:726:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```

GAATTCGGCC TTCATGGCCT ACACACTAAT AGGATTGGAT TTATGTATGT CCAGCTTGGG      60
AATTATTACA GGAATTAATA ACAACTTTTT AGAGTGCTTT CCTGAGCTCT CTTTCTATTT      120
GTTCCCCCTT CTACTTTTTG CTTCCCTGTG GCTGCTGTTT CTATCCTCCA GCCAGAGAGC      180
TAGTGTTTAT TTTCTCCATT GTGTTACACA CTTGTGCAGC TGCAACCACC ATATCCAGGG      240
GCTCGAG                                     247

```

## (2) INFORMATION FOR SEQ ID NO:727:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs



TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```
GAATTCGGCC TTCATGGCCT AGAATTCTAG ACCTGCCCCG GTCTTCCTCC TCGTCCTGCC      60
GCAGGGCCAG AACCCCTGAC GGTATTGAGC TGCGCGTAAG TCTGGCCGGT GCCATCTGTC      120
TCCGCAATGC CCCCCAAGAA ACAGGCTCAG GCCGGGGGCA GCAAAAAGGC GGAGCAAAAA      180
AAGAAGGAGA AGATTATCGA AGACAAAAC TTCGGTTTGA AGAATAAGAA AGGAGCAAAG      240
CAACAGTTAT CTCGAG                                     256
```

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 279 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```
GAATTCGGCC TTCATGGCCT AAGTGCTTGC GCTCTAATAA CCATGTTTAT CTCATGCCTT      60
TGGGCGTTTG CATATGTGTT TCCTCTGCTG ACACCAACCT CCTCCTCCTC CTCCTCCTCC      120
TCTGCTTGGC TGGCTTCTCT CAGTCTCAGT TCGGATACCT TCTCTTCTAG GAAAGCTCCC      180
CTGACCACTC TTTCTTTGGG CTTCTATAAC CCCCCTGTCT GCCCCCATCA GGGCACCTCC      240
CAAAATTCAG TGTTTCCTTT CCTCCTCCCC AATCTCGAG                                     279
```

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 231 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

```
GAATTCGGCC TTCATGGCCT AGAGAAACCT ATTTTTCAT TTAACCTGTT CTTTAAATCC      60
AGTATGTTCC AGAACATACA AAAATGTTTA AATGTTCCAT TTGTAAGAGG ATATCATGTA      120
TTTTATATCA ATTTAAATGC AGTTATCCTA ATCATTTTTC TTTCAATTTT ACCCTTTATT      180
AACTCTTCAT TTGTTTACAA AACAAATCCA CTCTATAAAC GCAATCTCGA G                                     231
```

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 253 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730

```
GAATTCGGCC TTCATGGCCT ACACACATAA TTAGTTATTT TACCATTCTT TCATAGTTTT    60
AAGAGCAAGT TTTCACAAGG GCGATTGAA TTAGAGGGTA GAATAATATT TAAAAATCG    120
TTTTCTATTA TTCAAATATA GAATGTTATT AAATTTTTTG GTATCGCTGG TTAAGTGCCT    180
AGAACTTGAT CATCTTCTAT TTCTTTTCC TTTTGCTAT GAGAAAAATA ATGCTCAGAG    240
AAGTATACTC GAG                                                    253
```

(2) INFORMATION FOR SEQ ID NO:731:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```
GAATTCGGCC TTCATGGCCT AAGAGACTTA ATTATTAACA AAGTATTAGA AGCTAGAAGT    60
AGGTAAAATA AGTGATTATT TTAATAAAAA TTATCCTTAC TTTACAAAAT CCATATTAAC    120
CTCACTTGAA ATTTTATGAG CTTTCTCTAT AAGTTTAAAG AGATAGAAAT CAGTGAAAGA    180
CCTCAGTAAT TCCTGCAATG ATCTTAATAG AAAATATTTT ATACCTTCTC TCCCTCGAG    239
```

(2) INFORMATION FOR SEQ ID NO:732:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```
GAATTCGGCC TTCATGGCCT AAATAAATAT CTCATTTTAA TTGTTACTTT GTTGGACTTG    60
ATTACTGCAA ACCTATCACT AATTCCTTCT GAGTTCACCG AAAGAAGTGC AAAACCCCTC    120
AATATATTAC CATCATGTGC TTCTTCTGTC CCACTCTTTT CCTTAGAGAC ATTTTGTTTT    180
TGTTGTTTTT AATTGGTATT GTATTGTTT TCAAATCTTT GTCCCCCAGC GCTCGACCTA    240
TAGTGAGTCG TATTAATTTC AG                                                    262
```

(2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```
GAATTCGGCC TTCATGGCCT ACACACATAA TTAGTTATTT TACCATTCTT TCATAGTTTT    60
AAGAGCAAGT TTTCACAAGG GCGATTGAA TTAGAGGGTA GAATAATATT TAAAAATCG    120
TTTTCTATTA TTCAAATATA GAATGTTATT AAATTTTTTG GTATCGCTGG TTAAGTGCCT    180
```

AGAACTTGAT CTTCTAT TTCTTTTCC TTTTGCTAT GAGAA A ATGCTCAGAG 240  
AAGTATACTC GAG 253

## (2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 301 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

GAATTCGGCC TTCATGGCCT AGTATCACAG GCTTTCTTCA AATAACCAGT TCCTCTAAGA 60  
 CATTGAAAAT ATAATTCGGT GTTTAAAATA AATTCATACC CGTTTGTGT GCTGTGCATA 120  
 AATAGCAAGT ATATGTGTAC CTTACCAAAC TTATGGTCCC CAGTCCCAA ATTCCAAAAT 180  
 TATGCAGGAG GGAAGGTTAG CCATTGCAGT AAACAATTTC TCCCTATTGA CCCATGCTCT 240  
 CCAGCTGATT ATGATGTGGG CAGTACTCAT CCAAGGCTAT ACAGACCAGC CGGGTCTCGA 300  
 G 301

## (2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

GAATTCGGCC TTCATGGCCT AGAGACACAA TGGGCTCCAA GAATTGAAA TCCCTCATCT 60  
 GTGAAGGCAG AAATACTAGG AGAATGGGTA ATGTTTATAC CATCAATGAA GAAACTCTTG 120  
 TAACCTAGGG TTTTCAAATT ACAGAAGAGG AAGAACAATG GAGGCTGATC TCCAGTTTGT 180  
 GACAGTCTAG ATAGGTGGCC TCAGTCTTGC TCTTATAAAT TCTAATTCCC AGAAGCTCGA 240  
 G 241

## (2) INFORMATION FOR SEQ ID NO:736:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AGTGTCTTCTA TCTTCCAATT TTCTTCTAAG TTTGTACATT 60  
 TTGCCCTTAG CTTTTTGTCTT CCTAGCTTGT CTTTTTCTT CTGCTTCCTA CTTTTCAGGT 120  
 TTAAATTTAT CTTTTTCTT CTAAAAGTAT GTTTTATCT TCTAATTTCC CTATCTTCTC 180  
 TATTCTTTTC TTGCTTCC CGTACTTCTG TCTTCCAGTT TTACACTTCA AACTTCTATC 240  
 TTCTCCAAAT T 251

## (2) INFORMATION FOR SEQ ID NO:737:

- ( QUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

GAATTCGGCC TTCATGGCCT ACAGGGTTGC TGGGATGATC AGTGATTTTG CTAATATCAA	60
AAGTGCCCAG CACAGTGCCT GGGTTGTTGG AGGCATTGAA CACACGGCAT TGTTATTATT	120
TATATGCCTT GTAAGTGGAA GAGCCTGTGG GCAAACAGTG GATGCTAAAA TTCAGTTTGT	180
GGAAGAACCA GGTGCACAAA CTCCTGTTCT ACCTGTGGTT GAGTCTACAC TCCCCCACC	240
CACCCAGCT GCTCTGATCT ACCTCCTGTT CCTTGAGCAG GCCATTTTCT TTCTTGCTTC	300
AGGGCAACTC GAG	313

(2) INFORMATION FOR SEQ ID NO:738:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT AGTGTCTGTTG TTCCATCTGG TTTTCTTCTT TCAAATTCGC	60
ACTGACTGTT CACAAGCCGC CTGGTCAGCT TTCCTCCAGA TTCCTTCACG ATGCGGTCAA	120
GCTGCTCCTG CTCTCTCTCT AAATTATTGC TTTTAACTT ATCTTCAAGC ATATCTTTGT	180
CTTTCTTTT ATTTTCTTTG CTGGGACTCT TGAAGGCGTG TGCTTCGGCA TCTCCAGAGT	240
CCTCTCTCTC TCTCTGCCAG CAGCCTCCGT CCTCCCCACT CTGTGAGGTG TCTGTTCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:739:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 196 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT AGGACTGTAC CAGCGCTATA CTGTAGTTAT TTTTTTAAAT	60
GAACTTCACA TATTTTGTGTA TTCTTTCAAA TTGTTTGCTA TATATAAAG AAGCTCACTG	120
CAAAATGCTT GAAGGAAAAA AGGAAACAAA AGAAATTCAG AACTTCCCAG AAATGTACAG	180
CTTTTCGGCC TTCATG	196

(2) INFORMATION FOR SEQ ID NO:740:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(B) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

```

ATGGCCTATG CCTCCCCACT CCACCCACCT CTGCCTTCCT TACTGCTGTA TCTGCTGCTT    60
GAACTGGCAG GAGTCACACA TGTGTTCCAT GTGCAACAAA CGGAGATGTC ACAGACTGTA    120
TCAACTGGGG AGTCAATCAT CTTGAGTTGC AGCGTACCCG ATACCTTACC AAATGGACCT    180
GTCTTGTTGT TCAAGGGAAC AGGGCCAAAC CGGAAATTAA TCTACAATT CAAACAAGGT    240
AACTTTCCCA GAGTAAAAGA GATTGGAGAC ACCACCAAGC CTGGCAACAC AGACTTTTCC    300
ACACTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

```

GAATTCGGCC TTCATGGCCT ACTGAAGGTA GGTGAGTTCA TCCTCTTCAT AGTAATGCTG    60
TTTTACCAAG ACTTTATAGC AGATGGACCC AGAAAGAATT TTCTGCTATT GTGTTCACTA    120
CAACAGGATA GGGACATCAG ACAGCCCCAG AAACCCCTTC CAGATCTGAT ATGGGACTAT    180
TAATTTTAT GCTGTTAATT GGTATTCATT CACAATGCAG TTGAAGGGGG AAGGCTCCAC    240
TGCATTCTTT GGCTAAGGCC TGAATGCTTG CTCATCTGTA AGATCTATAC TCGAG        295

```

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```

GAATTCGGCC TTCATGGCCT ATAAAAAGTG GGCCAGTTTA AAGAAAAATT TTATCTAAGC    60
AGTAGTACAG CTGGCTTTCC AATATGGCAA AATAAGTCTT TCTGTAGGAG ATATCACCAT    120
TTTGCCAGGA TTGAAAAGCC TCTTGTTTTG TGCCATATAA TCAAACTATA TCTGTGATTT    180
GAAAAATGAC AAAGGGTATA ATAATTCCTA GAATTGGTTT TAAATGAAG GAAAATAGTA    240
TCCTAGTTCA AAAGTTATGG CTCATTGTAA GTGCTGGTCT GGTATAACCA TACAGATTGT    300
TTAAAATCTT TAAATAAATA CTTGGCCCAA TCCCTTTTGT TCCCCCTTTC TCGCTGCCCT    360
GTAAACTCGA G                                     371

```

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAAATGACTC TAGCCTGTGG AAAGAGAATC ATAATTCTAC GGACCTTTTA AATCCGCCAG	60
GAACCCTGAA TATCTATCTT TTTTGCTTGA CATGTCTCAT GACTTTTGCA GCCTTGGTGG	120
GCAGCATTTA TTCCTAATT TCCCTGCTGA AAATGCAGAA CAGAACTGTT GTGTCCATGC	180
TTGTGGCTTC CTGGTCTGTG GATGATCTCA TGAGCGTCCT GTCGGTGACC ATCTTCATGT	240
TTTTGCAGTG GCCAAACGAG GTCCCGGTT ACTTCCAATT TCTGTGCAAC ACCTCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC TTCATGGCCT ACCCTAAGAG AAACCTCCTG GTGATAATCA CAGGGTCCAA	60
AAGTAAAGGA AACCTGGCAG TCTCTGGTGT CCATCATGTG CTTATTCCAC TTGGTAAAT	120
AATTTGAGAT GCCTTCTAGT AAGGAATGGA CCTTAGTGGT GATGGTTAGT TGCCTTATGA	180
TGACAGCCAC TGGGTGGAG TACTTAGAAA GCTTCCGAGT ACTAGACAGC TCCACAACCT	240
CTTCAAAAGT ATCCATGGGA TACAAAGGCT TAGGATCATT GAGACACTGA ATCAAGGGCT	300
CAATCTGGTA AAAATCTGCT TCTTTCCGAA GCAGATCAAA TTCCTTAAAA TCCNACGGTA	360
AGGTCAATTC TGAAGTTCTT AAGAAGTTGA GGACATATCG GAAAAGAGGT CCATCTCGAT	420
CAATAAAGTA ATTGCCTTGA GGGTCTCGAG	450

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

GAATTCGGCC TTCATGGCCT ACTTATTAAC CCCAATCAAT AGAGTTGAGA GACTATGGCT	60
TTAAAAAATT AATGCAAACC TGGCTTTAGC TGTAATAACA CCCACCGTAA GCACTTGGAC	120
TTAGTTATTA TAGACAAATG TAAAGAAAAT TTAATGAAAA ATAACACCCT CTCTCTTAAA	180
AAAAAGAAGT CTCAGGCAAT AGATGCCTGG TACTATGAGG AAGAATGTTA GAAATAGAAG	240
TGAAATCCCA GAGAAGCCN AAACCCCCCA ATCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GCAATATCAA ATAGCTAACT TCACCCCAA CCACAGTCCT TGCTGTTGGC ATTTACTCAA	60
CTAGTCTTTA ATTCTGTTT GACAACTTT ATAAGGTGCT ACAAGACAGA TGATTTTCA	120
CCATCTACCA TAATGTGGAA CAGATATTTT GTCTTCTATC TCCTGCTTTT GTCAGCGTTT	180
ACGAGTCAAA CAGTATCCGG ACAAAGAAAG AAAGGACCAA AATCAAATTT GCTTGCAAGG	240
AAAAGTGATG TCCAGGGGCA CCTCGAG	267

## (2) INFORMATION FOR SEQ ID NO:747:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GTTCTACCTG GAATATGGTC CTTCTACCTG GAATATTTTT TCCTCAGGCC TTCTCTGGCT	60
TCTTCTTCCT TTATTCCTTG GATCTCAGCT TAATCATCTC TTTGGCAAGT ATCCATGATC	120
CAAACTGGGT TAGTGCCGCT CCCAAGACCC CCTTTATTAA CCCTGTACTG GCACTTAAAA	180
CATACTCTAT TGTATTGCC AGTCCTTGG CCTGTCTGCA AGTTCCTTCA GGCATGCTG	240
CATCATTCTC ATTTATCACT GTATCTCCTG TGCCCAGCAG TCTCGAG	287

## (2) INFORMATION FOR SEQ ID NO:748:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGGCC TTCATGGCCT ACTTTATCTG CCTCTACACT CTCTTCTGGT TATTCAGGAT	60
ACCTTTGAAG GAATATTCTT TCGAAAAAGT CAGAGAAGAG AGCAGTTTGA GTGACATTCC	120
AGATGTCAAA AACGATTTTG CGTTCCTTCT TCACATGGTA GACCAGTATG ACCAGCTATA	180
TTCCAAGCGT TTTGGTGTGT TCTTGTGAGA AGTTAGTGAA AATAAACTTA GGGAAATTAG	240
TTTGAACCAT GAGTGGACAC AAGAAAACT CGAG	274

## (2) INFORMATION FOR SEQ ID NO:749:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCGGCC TTCATGCCTA GGCAGTTTTT GTTGCCTGCC ATTTTTTTTT TTTTTTTTNG	60
CACATCTCAT TATATATTTC TTGTGATCTT TGGAAAGTGA ACATTTTACA GAATACATTA	120

TAGCAAC	AGTAACCTT	CTCCCAGGT	TATTTGTATT	TGTTATTGC	TTATTTATTT	180
ATTACTAGCT	GGGTTTTTTT	AGTGGCACCT	ACTCCTCTCC	CCACTTAACC	CTCTGATGTT	240
ATGCTTGTTA	TGCCTGATCA	GGGCAGTTAC	GGATTGAATT	GTGTCCACTC	AAAATGTATA	300
TGCTCATGCA	CTGACCTCCA	GTGCTCAGA	ATGTGACACC	TCGAG		345

## (2) INFORMATION FOR SEQ ID NO:750:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GAATTCGGCC	TTCATGGCCT	ATAGAGTAGT	GATTTTGGTC	AGCGTGTGTG	CTATTTCGGT	60
GTTTCAGTTT	TTCAGCTGGT	GGAATAGCTA	CAATAAGGCA	ATCAGCTACC	TAGCCACAGT	120
GCCCAAGTAC	CGTATCCAAG	CTACAGAGAT	TGCCAAGCAG	CAGGGACTGC	TCAAAAAAGC	180
CAAAGAAAAA	GGCAAAAACA	AAAAGTCCAA	AGAAGAAATT	CGTGACGAGG	AGGAGAACAT	240
CATAAAGAAC	ATTATAAAAA	GTAAAATAGA	TATAAAGGTT	GAATTCGAG		289

## (2) INFORMATION FOR SEQ ID NO:751:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GAATTCGGCC	TTCATGGCCT	ACGTAGGCAG	ATGGAGCTTG	TTATAATTAT	GCCCCATAGG	60
GATAGTACAA	GGAAGGGGTA	GGCTATGTGT	TTTGTGAGG	GGTTGAGAAT	GAGTGTGAGG	120
CGTATTATAA	CAAGCTCCAT	CTGCCTACGA	CAACAGACC	TAAATCGCT	CATTGCATAC	180
TCTTCAATCA	GCCACATAGC	CCTCGTAGTA	ACAGCCATT	TCATCCAAAC	CCCTGAAGC	240
TTCACCGGCG	CAGTCATTCT	CATAATCGCC	CACGGGCTTA	CATCCTCATT	ACTATTCTGC	300
CTAGCAAAC	CAAACTACGA	ACGCACCCTT	CTCGAG			336

## (2) INFORMATION FOR SEQ ID NO:752:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AAGGAAAGAA	GAGCAACTTT	GTCAGCTTGA	GAAGGAACAG	60
AAAGCCGCCC	TTCCAGCTA	TTTCCAAAAT	AGAGTCTGCC	TTTAACTGTG	GATGTCCGAG	120
GTTGCGCTGA	TTTTCAGGGC	TATTCTCAA	GAGAAAGGCA	GAGTCAGTCT	TCCTGCCTTT	180
CTACTCTCAG	GCCTCTTTCC	TGAGTGCTAG	AAGGAGCTCT	TTTAGTTGGT	TTATACCTCG	240
GGACCCTTAT	TTCCCTCTCA	CCCTCGGCCC	CAATCTCGAG			280



## (2) INFORMATION FOR SEQ ID NO:753:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```

GAATTCGGCC TTCATGGCCT AAGAAGAAGT AACTGCCTT GCCTGGACTA TTTCCAATGA      60
TGCCAAACAA TAATTGTTGC CCCTGTCTT TCTTAAAGG AGACTGCATC CATTTAACCA      120
AACTAAGAAA TTTTCAATTA GTCCTCTGCT GAAGTCATAC TATACACATC TACTTAATTA      180
AAGATACATT TATTGAAGAG AACAGGTCTC CTCGGGGTTT ATCTGCTATA GCCTTGCTTA      240
GGAAAGGAAT AATAGTCTGT CTTTAAATTA GGTGTGGCTA TTGATTGGAG CAAATGTTGT      300
CAGGTGGCCC AAGCATGAAT CAATGAGTGA CCATGAGGTC ACCCATCAGT GAGGGCACCC      360
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:754:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```

GAATTCGGCC TTCATGGCCT AACCTATTG CCTCAGTCCT ATCTGATTCA TGAGCACATG      60
GTTATTACTG ATCGCATTGA AAACATTGAT CACCTGGGTT TCTTTATTTA TCGACTGTGT      120
CATGACAAGG AAACCTACAA ACTGCAACGC AGAGAACTA TTAAAGGTAT TCAGAAACGT      180
GAAGCCAGCA ATTGTTTCGC AATTCGGCAT TTTGAAAACA AATTGCCGT GGAAACTTTA      240
ATTTGTTCTT GAACAGTCAA GAAAAACATT ATTGAGGAAA ATTAATATCA CAGCATAACC      300
CCACCCTTTA CATTTGTGTC AGTGATTATT TTTTAAAGTC TTCTTTCATG TAAGTAGCAA      360
CGGGCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:755:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

```

GAATTCGGCC TTCATGGCCT ATGGAAAAC ACTCATTTCAT TCTTCAGAAC TGTTTTTCAGG      60
ACTTCAAGGA GGCCTTCCCT AACCACCCTA TTTAACATTC CAGTTCTTGC ACCATCCCCA      120
CCCCTACTCT GCCCTCACTT TTTTCTCCAT GGCCTGGGC ACCAGCTGGC TAACTCTGTC      180
TTCAAAAAGT ACTTTTCTTT GGGGGAGGTT TTTCTTTTGT TTTGTTTTC TTTCTTTCAG      240
TCCTGTATCT TCAGCACTTA GAAGAGTTCA TGGCACACAT CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:756:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

```

GCGCGGAGTG GGACAGCGCT GGTGCGGAGA CTGCTTCCGG ACTCCAGGTA CCGCGCTTGG      60
CGGCAGCTGG CCCAGACTT CTGTCTTTTC AGCTGCAGTG AAGGCTCGGG GCTGCAGAAT      120
TGCAACCTTG CCAATGGACC TGATCGGTTT TGGTTATGCA GCCCTCGTGA CATTGGAAG      180
CATTTTGGGA TATAAGCGGA GAGGTGGTGT TCCGTCTTTG ATTGCTGGTC TTTTGTGG      240
ATGTTTGGCC GGTATGGAG CTTACCGTGT CTCCAATGAC AAACGAGATG TAAAAGTGTC      300
ACTGTTTACA GCTTCTTCC TGGCTACCAT AATGGGTGTG TTCTCGAG      348

```

## (2) INFORMATION FOR SEQ ID NO:757:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

```

GCGAGGTCAG GAGCTATGGG ATGGTATTAA TACATTGGCA GAGCAACCCA AGGGGGCAGC      60
ACATGCAGTG AACTGCCATG CAGAACTCCC GACGGGCCTC TTCCCATCC CAGAGTGGGG      120
AACAAACACGC CGTCACAGAC AAGGAAGTGG GTGCCCCCGT CCCCTCCCCG ACCCCGAGAC      180
CCAGGAGTGC TGGGCTCCGA GCAAGTCTAT TGCAATGCTT CCTGGCCAAA GCTATATGGA      240
AAGCGGGAAC AGCAGGCTGG GGAGATGATG CTGGGGGGTG GGAAGGAAA GCGTCTCGAG      300

```

## (2) INFORMATION FOR SEQ ID NO:758:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```

GAATTCGGCC TTCATGGCCT AGAATATTTT ATTATAAATA TAATATATGA TTTTTTAACC      60
TGTTTGTGTG CCTCATATGC TGTCAGGTTA ATTGTGTTTC CTTCGTGCCA GAGGTGGGGA      120
GGAAGGCACT CTGTCTGCTG GGTAAATGCC TAAATTCAC CACCTTCATG GTTTGGGGGC      180
AGCATGGTCA TTGTGGATAT TGGTTTGTGT GAGTTGAGGG AACTTAGGAT ATAAGTTCAC      240
TCCCTCTATT TTTCTTGTG ATTCAGTTT TCAGAAATCT TTTTCTTTC CTTTCTCCC      300
CATTGTGGAA ATTACAAATC AAAGGCCTT TTCTTTAATG TAAAGTGAT TTATTAAAA      360
AAAATACAAA ATAACTACA AGTCTATCTC GAG      393

```

## (2) INFORMATION FOR SEQ ID NO:759:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

GAATTCGGCC	TTCATGGCCT	AAGCACATTC	AAGATGCCCA	CNAGAACCAT	CGTGTTGGGC	60
TCATGTTTAT	TACTTAAGCA	AGAGAGCTCT	TACCCAAATT	CCTTTGTTTC	CCCACTGTCA	120
GAAACAACAT	AGTCTGGAAC	TGGAGGCCTA	GAAGTCTGGT	TGTATTTCTT	GTAGTGGGTA	180
AAAGTCNACA	AAGATAATGA	ATGAGGCAGT	GTCTCCTCAT	GCCTTCATAT	TTTCTTTTGT	240
TATTTTAATT	TTTTTTTATT	TTTATTTT	GTGGGTGATA	GTAGGTATAC	GTATTTGTGG	300
GGTACGACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 288 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

GGAAAAA	GGTAAGATGG	ATGAAAAGGA	GGAGAAGGAA	TTTAATACTA	AGGAAACCAG	60
AATGGATCTT	CAAATAGGAA	CAGAGAAGGC	TGAAAAGAAT	GAAGGTAGGA	TGGATGCAGA	120
AAAGGTGGAA	AAGATGGCAG	CAATGAAAGA	AAAGCCTGCA	GAAACACTT	TATTTCAAGG	180
CATACCCAAA	TAAAGGAGTG	GGTCAGGCTA	ATAAGCCTGA	TGAAACTAGT	AAAAGTAGTA	240
TTTCTGGCTG	TATCAGATGT	ATCTAGCAGT	AAACCAAGGT	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 482 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

GCTCGAGGCA	GGGGGAAATG	GCGGCTTCAG	GAGAGAGCGG	GACTTCAGGC	GGCGGAGGCA	60
GCACCGAGGA	AGCATTTATG	ACCTTCTACA	GTGAGGTGAA	ACAAATAGAG	AAGAGAGACT	120
CGGTTCTAAC	TTGAAAAAAT	CAGATTGAAA	GACTGACCCG	TCCTGGTTCC	TCTTACTTCA	180
ATTGAACCC	ATTGAGGTT	CTTCAGATAG	ATCCTGAAGT	TACAGATGAA	GAAATAAAAA	240
AGAGGTTTCG	GCAGTTATCC	ATCTTGGTGC	ATCCAGACAA	AAATCAAGAT	GATGCTGACA	300
GAGCACAAAA	GGCTTTTGAA	GCTGTGGACA	AAGCTTACAA	GTTGCTACTG	GATCAGGAGC	360
AAAAGAAGAG	GNCCCTGGAT	GTAATTCANG	CAGGAAAAGA	ATACGTGGAA	CACACTGTGA	420
AAGAGCGAAA	AAAACAATTA	AAGAAGGAAG	GNNAACCTAC	NATTGTAGAG	GNGGNACTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 83 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```
GGGGGATGCC AACATTAAA GCAAGAGGCA GAAGGGCTCC TGCAGGAGAC AGGGAATCGG      60
GAAGGCAGCA GGTAAACTC GAG                                              83
```

(2) INFORMATION FOR SEQ ID NO:763:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 296 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```
GAATTCGGCC TTCATGGCCT AGGAATTGAA AAGAAAGGCA GAGGAGGAAA GGATTCGCCT      60
AGAAAGAGGA AGCCCGAAAG CAGGAAGAAG AAAGGAAGCG GCAGGAAGAG GAAAAGAAAA      120
AACAGGAAGG GGAAGAGAAA AGAAAGGCAG GCGAGGAGGC CAAGCGGAAG GCTGAGGAGG      180
AGCTGTTGTT GAAAGAAAAG CAAGAACAAG AAAACAAGA GAAAGCCATG ATTGAAAAGC      240
AGAAAGAAGC AGCAGAAACA AAGGCCCGGG AGGTAGCTGA ACAGATGCGT CTCGAG        296
```

(2) INFORMATION FOR SEQ ID NO:764:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 289 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```
GAAAAGAAAC TAACCAGGAT TCCCTCAGTG TTATTACTG GGATTGGCAT ACGTGTTCAC      60
AGGCAGAGTA GTTGATCTCA CGCAACGGGT GATCTCACAA AACTGGTAAG TTTCTTATGC      120
TCATGAGCCC TCCCTTTTTT TTTTAAATTT GGTGCCTGCA ACTTTCTTAA CAATGATTCT      180
ACTTCCTGGG CTATCACATT ATAATGCTCT TGGCCTCTTT TTTGCTGCTG TTTTGCTATT      240
CTTAAACTTA GGCCAAGTAC CAATGTTGGC TGTTAGAAGG GATCTCGAG                289
```

(2) INFORMATION FOR SEQ ID NO:765:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 306 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GCACCAAGAG	TTATTA	GGGCAATCAA	AAGATGATTT	ATTAT	AAAAAATCAA	60
TGTGGCCTTC	CCITCCTCTT	TCTTTTGATT	CCCCTCTTTG	AGTTTTIATG	TGTCTCTTTT	120
GCCTTCCTT	CCCAGAGTGG	AGGAGTTAGA	CCTGCATTGT	GGGATGAGAG	GAGTTGTGGC	180
TATGTGTCTG	CTGGCACCAA	GAGGGCTGAG	GGTGAGGTGT	GGAAGGGACA	GGGGGAGGAG	240
ATGGGCAGCA	TTGTTAAGAG	ATTGGTACCA	CTGAGCAAAT	ATGTTGAGAA	TGATGATTGG	300
CTCGAG						306

## (2) INFORMATION FOR SEQ ID NO:766:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

GAACCTTGAC	ACCTACACTT	AAATTCTGAG	TCATTAAACA	GGCCTACATT	TATCAACTGT	60
GGAAATATCA	GCCAGTTTTT	GCAAACCTCT	TCTTAGGACA	CTAAGTTGTT	TGCAGAAATC	120
ACTAGCATTG	ACTGACTCAG	CAACAATGTG	GTTATATTCT	TTGATTAACT	TAGTCCTTTT	180
TCTTGGTCAA	GAGTCAGTAG	ACAGGACTGA	AGCTTATGCC	CCTTGCCCCC	CCACCACCAC	240
TCCATTACTA	CCACCTTGGT	TTAGCCATCC	TTTTCTTGAT	CTGTTCTCCC	CACTTCTACT	300
GTGCTACTCT	ACAGACTTGC	CCTGAATGTA	AGAGCAACAA	TTACCTTGTA	AAGTCCAAGT	360
TGGGGCAGGT	CACTCCCAA	CTCCACAACC	TCGAG			395

## (2) INFORMATION FOR SEQ ID NO:767:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC	TTCATGGCCT	GCCTCGCTGC	TTTCTTTTCT	CCAAGACGGG	CTGAGGATTG	60
TACAGCTCTA	GGCGGAGTTG	GGGCTCTTCG	GATCGCTTAG	ATTCTCCTCT	TTGCTGCATT	120
TCCCCCAGC	TCCTCGTTCT	CCCGCTCTG	CCTGCGGACC	CGGAGAAGGG	AGAATGGAGA	180
GGGGGCTGCC	GCTCCTCTGC	GCCGTGCTCG	CCCTCGTCCT	CGCCCCGGCC	GGCGCTTTTC	240
GCAACGATAA	ATGTGGCGAA	TCTCGAG				267

## (2) INFORMATION FOR SEQ ID NO:768:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

GAATTCGGCC	TTCATGGCCT	AGCATGTCTT	CTGCCTCGGC	CTCCCGGGTA	GCTGGGATGG	60
CAGGTGTGCA	CCACCACGCC	TGATTTTGT	ATTTTGTAGTA	GAGATGGGGT	TCCATCCATC	120

```

CATTCTTCCATGAAGGC CGATCTTGTT TTCCTGAAAG TCCATCA AAAATACTTG      180
TAGAAAAACC TTGTCACAAC TGATTGAAT GTTCCTATT TCTTTTCCTT TGACTTTGAT      240
ATTGGCTTGT AATGTCCTCTT TTCATCATAT GTAATATCAG TGGAACAGGC AGCGCTACTC      300
AAGTCCTAAG GATTCTCTCAG TGATCAGTGA TCCAGGGCCG TTCATGAACC ACTGGGCTGG      360
ATTTGACTGT TGAGTGTGGC AGTTAATGCC CCTCAAGAAA TCAAAGGATG TCTTATAAGT      420
GTCTTCCAAA AAAAAAGCAA ATGCTGAAAT CCTATTGGCA AAGTAAACTG AAATTGGCTG      480
CTACCACTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:769:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT AACGTGAGCT GCAGGAGCTG GCCCGCAAGC TGCAGGAGCT      60
GGCCGATGCC TCAGAAAACC TCCTTACCGA GAACACGTGG CTCAAGATCC TGGTGGCGAC      120
CATGGAGAGG AAAGTGGAGG GCAGGGATGG AGCTGAAAGC CTGGCGGGCC AGAGAGAGGT      180
CCACCCCAAG CAGCCTGAGC CCTCAGCCAC CCCCAGCTC CCTGGCAGCT CCCCTCCACC      240
TGCCAATGTC AGCGCCACAC TGGTGTCTGA AAGGAATAAG GAGAACAGGA CAGACTAACT      300
TTTTAAATGA TATGAAGTAA ACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:770:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

GAATTCGGCC TTCATGGCCT AGTGGANTCT TGGAGATAAG CTGAGCTTGA TGCATTGCTA      60
CCACACACTC CAAACCATGA AGAAGGTACC GTTGGGCTTT TTGTTGTTGT GACAAAATCG      120
TAGGAAATGG CGCCTGTATT TCTTAATCTG TTCTCTAATC TTCTCATTAA AAAGAACTTC      180
AGTTAGAACA AGAGGGCCCA TGGCTTTTAC ATCCAGTCTT TCTGCTTCAG CAACGATTTC      240
TTTGTGAGAT GAATCAATAA CACCCTCTTC TTTCTTTTTC TTAACAAAAT CAAAGAGGAT      300
ATTGACCCTC TCCTCAATTG TTCTTTCCAA ATCATCACTG AGTGTCAGAA CTTTTCATG      360
GTCAGTGATT TCATCCATTG GACGCCTTTG AGCTTCCTCA GTTGTATCTT CTCCCCAGTC      420
ATCATCCTCC TCTTCTTCCA TTGTATGTGG AGGAGGATTA ATTTCATTG GTGGTGGTGG      480
TGGTGGTGGT GTCTCACTGC TGGATACGGA ATTGAATTCT AGACCTGCCT CGAG

```

## (2) INFORMATION FOR SEQ ID NO:771:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GAATTCGGCC	TTCATGGCCT	ACTAGAATGT	GTGACTCTGT	GGGACTGCA	TAGGTTTGTT	60
AATTGACCTA	TAGCTAAACC	TTAATGTGTT	TGTGTGTCTA	TACATTGCTT	TCCGCATTTT	120
AAGACATCCA	GACGCTATTA	CCAACATTTT	CCTGTGCATT	AACCTCTGCA	TGTGAAAAC	180
TTTAACAGTT	ACTGAACTAT	GTAAATATGT	GAATTTTTTT	ATTTAGGTGG	ATGCATTTTT	240
TGCTCTTTA	CTGCTCTTCT	CAGCTTTATT	CAATAAACTT	GCATTTTAAG	GGTTGTATTG	300
GCAATTTTAA	CTTAAAATGT	GCATCATGAT	GGAAGGTGCA	GACTTTTTTG	GAAGTTTCCG	360
AGAGGAGGGT	CTATAGACCA	TTTGTGAGAA	ATCAGATCAA	CCCTCGAG		408

## (2) INFORMATION FOR SEQ ID NO:772:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

GAATTCGGCC	TTCATGGTGT	CGTCTCCATT	CTGATGCATC	AGCTCAAACA	GCTCTGAGTC	60
CAGGATCTGG	ATGAGGGGAGC	GCATGTTGGC	AAAGTGGGTG	TCCATGGCAC	CCCCGTTGGG	120
GAAGTTCTGG	CTCATCCTCT	TCATGAGGTG	GCTGAAGCAG	CTGTAGGCCA	GCTGATCATT	180
GTCGAGGGTG	ACCAGGAGAG	GCGCCAGCAG	ATCGCACATG	CCCTGCACAT	AGCCCACGTC	240
CAGGTGCTCC	CACACGTAGC	TGCACATGAC	GTCTCTGAGC	CTCTCGAG		288

## (2) INFORMATION FOR SEQ ID NO:773:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

GAATTCGGCC	TTCATGGCCT	AATCCAGTGA	CTGACAAAGC	AAAATTGCAT	GAAATTTACA	60
TTTTTTTTCT	TCTTGTAATT	TAAAACTTGG	TTCTGTATA	CCTTCCTGGA	TCTTTATACT	120
TTTGATCTT	TTCTACCATT	TCTGTAAAAC	CTCAACTGCA	GGGTGCAATA	ATGGGCCTTA	180
TTTTCTATAT	TTTACGAGGA	CAGTTGCTGA	AAATGGGTTT	AAACTCCACT	GGCATTATAT	240
CCCACACAAC	TCGAG					255

## (2) INFORMATION FOR SEQ ID NO:774:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

GCNTTCAGGC	CNAAGGTACT	TTAATCAGTC	TAAATACTTG	AACATTTTAA	TTTCAGTGGT	60
AAAAAATAGA	CTGAGGCAGA	GTGAAGTTAT	AAATTAGAAT	CTAAAAATTT	ACCCTTCAAC	120

ATTAATTTTAGTGCCT CTAATATAAA ACACAGAAAA CTCAA ATATAAAGA 180  
TGAATATAAA ATTATTAATT AAACAACNGG CGCTCGAG 218

## (2) INFORMATION FOR SEQ ID NO:775:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

GCCTTCATGG CCTAGAAAGG AGCATCCCTG TTTTGGAGT CAGGACCATT CAGGGGGTGA 60  
 ACGAGGCCCA GGCCAGGTGC CTTTTGGAG CCTGGAATAT TAAAACCAGG ATGCCAAAAT 120  
 TGTAGTGTGA TCTCAGTCTT TACATTTAAC AATTATATAC ATTTTAAACA TGGAAGATTA 180  
 CAGTATAATT TATTTAGGCT AATCAGAAGC TAATTATAGG CTATTTAAAA ATGTTAATTT 240  
 GTAACACANT ACTCGAG 257

## (2) INFORMATION FOR SEQ ID NO:776:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC TTCATGGCCT AAAGAAACAA AGAAACAAAC CGTATATATA TATCTTCAGA 60  
 GTTAAAAAAT GGTGAGAACA AGAGCATTGT TTTATATAT TTTCAACTC TCTTTAACTT 120  
 CTGGCTTAAT AGAAGACAGC TGCATTCTCA TTATTATTTA TTTATTTT TTTAGATGGT 180  
 GTCTCGCTCT GTCACCCATG CTGGAGTGCA GTGGCGTGAC CTTAGCTCAC TGCAACCACC 240  
 ACCTCCCCAG GCTCGAG 257

## (2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

AGCTTCATGG CCTAGTCTCA GGTTAAGTTT TTGTCAGTAA TCTTCTTTC CCCTAGAAGT 60  
 GAGTAAACT TTCTGTATCC CTTTTCTCC CCACCTATGT TCCCTAAAT AGTGATTCTC 120  
 TTACAAGGAA TTATTATCGC CCCTGCAGTT TTGGAAGGAT ACCTCCAAAA TATATCTTGG 180  
 GGACTTCGAT TTATAGAATT TGGTTAAGC TTAGATTCTG AGTCCCAGGG TACCTGCCTC 240  
 GAG 243

## (2) INFORMATION FOR SEQ ID NO:778:



- (i) S CE CHARACTERISTICS:  
 (A) LENGTH: 309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```
GCTGACAGGA GCATTATGAA GCAAATGGTC ATTGATACAG TTTCAGTGAG GGAGTATAAC      60
ACTGGGATTT TGCAGCCTGT GGTGTTTCACT CTCCTGACCT CTATGCCAGC ACACAGACAG      120
CAAGAAGCAG TGGGGAACCT TGAGCTTCAA GCTCTACATT GGTTCGACAA AATCAATTCA      180
TCACTGTCTC ATTCATTAAT GTGCTGTCTG ATACTGACAT TTGTCAATGG CTTGTTTCTG      240
GAAGCCCCTG GTCCTCAAGG CTGGTCAGCT CTACAGTCAC AGCCCCAGGG TGAACCCCAG      300
CAACTCGAG                                     309
```

(2) INFORMATION FOR SEQ ID NO:779:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 255 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```
GAATTCTAGA CCTGCCTCGA GCCTGGGTGA CAGAGTGAGA CAATGTCTCA AAATAATAAT      60
AAATAATTCA ACATGATTTT TGGTGCGGAC AAACAAACCA TATCCAAACC ATTTACTCAT      120
CCTAGTTCAG GACAGTGTCC TGGGACTGAC ACAAGGCTC ACAGCCAGCT AGCACTGTGG      180
GCTCTACGG GTCCCTTCTG CTGTTTTATT TTAGTAGTTA TTTATTTCCA TTCCTCACTT      240
CCACTACCAC TCGAG                                     255
```

(2) INFORMATION FOR SEQ ID NO:780:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```
GAATTCTAGA CCTGCCTCGA GCTAATGGGT GCATGCTACC ACGCCCGGGT AACTTTTTTT      60
TTTNTGTTT TGTGTTTGTG TGTGTTTGAG ATGGAGTCTC ACTCTGTTGC TGAGGCTGGA      120
GTGCAATGGC ACGATCTCGG TCACTGCAA CTCGAG                                     156
```

(2) INFORMATION FOR SEQ ID NO:781:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 280 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) ECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT      60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATTCTC      120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TTCCTTCCTT CCTTCTCTCT      180
TTTCTCTCTT NCCATCCCTC CCTTCCTTCC TCCCTCCCTT CCTTCTCTCC TCCCTTCCTT      240
CCTCCCTCCC TCCTTTCCTT CCTCCCCCA CCCACTCGAG      280

```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```

GAATTCGGCC TTCATGGCCT AGCCGTGTTG TTAATTGGTG AATGATAAGG CCTAGATCTG      60
GTAGTGCTTT TGTITGCTCT AAGGTCTATT AATTTAATGT AGCAATCTTT CTTTTCCTT      120
TTTCTTTTCT AACTTCACAT CAACCTAACT GGCTACCTAA ATGTTTCATTG AATGACTGTT      180
TTTGCTTTGG GATAGAATCC TCCTTTTFTA TTTTAGGGT GTTAAATTGA TATAGTATTG      240
TTTAATAGCT AATAAGATAC ATTTTGGGCT AAGTTTCTTA GGCCATGAAG      290

```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

```

GAATCTAGA CCTGCCTCGA GAATGGCTTT GCAGATCTGG GATCTTGTGT TCCTTCTTTC      60
TGGGTGTTT TTATACGTTA ACTGTCAGAG GCATATGCCA CTTTATTCAG GTTCTCTGAG      120

```

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```

GAATTCGGCC TTCATGGCCT AGTTTAGGTC AGTAGCAAAT GGGCCCAGTG GGAGAGAGTA      60
TGCCCAGAGT TTGGAGAGGG TCAGGGTGTC GGGTGCTGGG ATGAGGGCTT CATGTTTGGA      120
AGACGCAAGG TAGAGAGCAA GAGAGGAGGA AAGGTAGAAC AGGATGGAGG GCAAGACCTG      180

```

TGTAAGAAGA TTAAC TGTAACATG GGTGTAGTGA GGGT GCTAAGAGGA 240  
 AATGGATCCA GATGGGCTTG ATGGGTAGCA CTCGAG 276

## (2) INFORMATION FOR SEQ ID NO:785:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAATTCTAGA CTGCTCTCA GGCAGTGAAG GACTGGCACA TTGTGTAATA AACAGAATCA 60  
 AAGGCAGAAA TTAGATTACA AGCCACCTGA TGATGATAAA ATCAATCACC CTCATCAAAG 120  
 GGATTTGCTT TGTGTGTGTT TTTCTCTTC ATTCTTGTGG ATGCAGACAG GATATTGAAC 180  
 AGCAGCTGGG CTCCTTGATC TTGGCAACAG ACATCAACAG GCAGCGTCTC GAG 233

## (2) INFORMATION FOR SEQ ID NO:786:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

GAAGATTTTG CCACTCTAAG GAGAGGTGAT ATTTGTATTT TTCTTTTAC TGAAACCAGA 60  
 TCGTGAGACA CGCTTTTCAT TCATACTGA AACTTGATAA AATGTTTGGC TTTATATTAA 120  
 TTTTCTCAAT TATAAGTGTG GGAAATGAAT TCGTTGATAA CCCTTTTCAA GTAAATGAAC 180  
 TGATTAGAAC CAGTAAGCTC GAG 203

## (2) INFORMATION FOR SEQ ID NO:787:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 262 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

GAATTCGGCC TTCATGGCCT ACGAGATTGT CCTGGGTCAC ATAATGCCAG CTGAGCGTAA 60  
 AAAGCCAGCA AGTATGGAAG AAAAAGACTC TTTACCAAAC AACAAGGAAA AAGACTGCAG 120  
 TGAAAGGCGG ACAGTGAGCA GCAAGGAGAG GCCAAAAGAC GATATCAAGC TCACTGCCAA 180  
 GAAGGAGGTC AGCAAGGCC CTGAAGACAA GAAGAAGAGA CTGGAAGATG ATAAGAGAAA 240  
 AAAGGAAGAC AAGAACCTCG AG 262

## (2) INFORMATION FOR SEQ ID NO:788:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 259 base pairs

) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

GAATTCGGCC TTCATGGCCT ACAAACAGCT GGAATGTCT CCAAGCCAGA GTGGACTACT	60
AGTAGGTATT CGTTACTTCA TTGAATTCTG CAGTGCCCCC TTTTGGGGTG TAGTGCAGA	120
CCGCTTTAAA AAAGGCAAAA TTGTCCTCCT CTTTCTCTT TTGTGTTGGG TTTTATTCAA	180
CCTGGGCATT GGATTGTCA AACCTGCTAC CTTGAGATGT GTACCAAAGA TTCGCCAAC	240
AACTCACCCC CAACTCGAG	259

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

ATACTTTAAG TTCTGGGATA CGTGTGCAGA GCATGCAGNT TTNTACATA GGTATACAG	60
TGCCATGGTG GTTTGCTGCA CCCATCAACT CCTCATCTAC ATTAGGTATT TCTCCTAATG	120
CTATTCTCC CTTAGTCCCC CGTCCCCTCG AG	152

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGGCAAATTT GGCACTGAAT ATGTACTGGA CTGTGATTAT	60
TTTTATTGTT TTAAAGTCA GCTTCCCTCC CTCCTTCCTC CTCCCTCCTT CCCAAGCTGA	120
ATCTGAACCA AGGAAGTCTT CCTACAGAGC CACTGACTGG TCCCCACTAA GGCAGGGGTG	180
GAGGGAGGGG CAGGATGTTT TCCTCTCCAG CCTTTGTCTT GCAGCAGATC CCCAACTCGA	240
G	241

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

```

GTATTTGACT CAAAGTATTT TTTGACTGAT AGCAGTATAG CTCCTCATT CCCTGCTCTC      60
TTTTGGTTAT CATTTGCATG AAATATAATT TTCTATCCCT TTACTTTTAC TGTGTCCATA      120
AAAGTGAAAT GAGTCTCTTA TGGGCAGGAT ATAGTTGGGC AATTTTATA CTAATTCTGC      180
CG                                                                    182

```

## (2) INFORMATION FOR SEQ ID NO:792:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GAATTGGGCC TTCATGGCCT ACAATCTTCT TGGCCTGGCA CTAAGGACCT ACTACAGACT      60
GGCACTGAAA TATCTTCCCT ACCTTATCAT TCCTTGTGCT TCTCCACAAG CCCACTCTTC      120
CCCTTCATCA TACATGTGCC GACCTTTCCT GTCTCTTTA CTTTGAGCA CCAAATGCTT      180
TCTACTTTGT GGTCTAGGAG GAACACATGT CACTTTTGT AGCTGCTCGA AAGCAGGGGG      240
CACACCTTCA TCCTTGTTTT CCACACAACA CCAA                                274

```

## (2) INFORMATION FOR SEQ ID NO:793:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

AATTCGCCTT TCANGCCTAG TGAGTAGTTA TCAACACCGG AGATGCATTA GATCAATCTC      60
TGGGGGCTTC TTCCTGGACC TGCTTCCATA TACACTTATT CATTTTGTCT TCACCGGACA      120
TGTTAAACTT CCAGAGTGAC TCTAATGTGC AGACATGGTG AACATCATTC GCTTAGCTGC      180
ATGTCAGCGC TCACTCAATG TCTGTGAACA GTGAAAGCTA CTTATTCTAC TTATAAGTTC      240
ATTAAGTCTG TGTATAACTA TTGCAAAGCA GAATAGTTGT CCCAGCCACC TGTGTTTGGG      300
GAGATGAAGC TGGGAGGCCA TCAACCTTCT TTGCAATAAA TTTCCTCAGC TTTTGTCAAG      360
CAACCTGTTT TTTGTATTCT CAGCTAGAGG CTTTCATTCT CTATCCCCCA CTCGAG      416

```

## (2) INFORMATION FOR SEQ ID NO:794:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAGATGGATG TCTCTCTTTG CCCAGCCAAG TGTAAGTTTCT GGCGGATTTT CTTGCTGGGA      60
AGCGTCTGGC TGGACTATGT GGGCTCCGTG CTGGCTTGCC CTGCAAATTG TGTCTGCAGC      120
AAGACTGAGA TCAATTGCCG GCGGCCGGAC GATGGGAACC TCTTCCCCCT CCTGGAAGGG      180

```

CAGGATTC AACAGCAA TGGGAACGCC AGTATCAACA TC CAT CTCAAGGAAT 240  
 ATCACTTCCA TACACATAGA GAACTGGCGC AGTCTTCACA CGCTCAACGC CGTGGACATG 300  
 GAGCTCTACA CCGAACTTCT CGAG 324

## (2) INFORMATION FOR SEQ ID NO:795:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

GATTGGCCT TCATGGCCTA GCAAAAGGGA CAAGGGAGAG AACAGGAGTA GCAAAAATAA 60  
 AATAAGAAAT TATGATGCTG CTTTACCAG AGACAAGCTG CTGCCACCAC TAGGCTGGAA 120  
 CCTACAGGCT GCACCTGTCC CTAATTAGGG TATTGGATAC TATTCACACT GCTCCTGCAA 180  
 CAACTGCTAG CTTGTTCTAA TCAGTAACTT CTCTCTTCT CTTGTCTTCT CACCTCCAG 240  
 TTCCTCCTAA CAGGAACCCA GCTGGCAAAG ATGTCTGGGA AATGTCATTT GCATTCTCAG 300  
 CCCCAGCAGT GCAGAAAGGT AGGAGTGGGG CTGCGAAACA ACAGAAAAAT AAGGACCATA 360  
 GGTGACAAAG GAAATGCATA TACACTTCAC AGATGGCCCA TAAACATATA ATACAAAGAG 420  
 GTGCCTCGAG 430

## (2) INFORMATION FOR SEQ ID NO:796:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

GAATTCGGCC TTCATGGCCT ACTCATGAAA TGTCCCAAAG TCTTCTCATT CTGTTCTTCC 60  
 CTCTCCTTTT CTTGGTCTT ACTTCTGTAG ACTCTAGCAG AGATGGCATC CTGGGATGGA 120  
 ATGGCAGAGA TCTGATGCAG TGGCATGCTC ATCCCAACCT CTTATCTGGT CGTCTTCTTC 180  
 ACAGAAGAGA GTCTCCACTG GTAGAGTCAT TTTGGGCCAT GGATTCAAG CTATGCTTTC 240  
 CTTCTGGCAC CCCGAATGTA CGCAGGTCTC TCGAG 275

## (2) INFORMATION FOR SEQ ID NO:797:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

GCACAATATT TCAAGCTATA CCAAGCATAC AATCAACTCC AAGCTCGGAA TTTTAATTAC 60  
 GAGGAGGTTA GTTGTGGCAA TAAAAATGAT TAAGGATACT AGTATAAGAG ATCAGGTTTC 120  
 TCCTTATGTG TTGTGTATGG TTATCATTG TTTCGAG 157

## (2) INFORMATION FOR SEQ ID NO:798:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC TTCATGCCAA ATGACCAGCC CCTACTGAAG TCCCCAGCAC CTCCTCTTCT	60
GCAATGTAGCA GCCCTGGGCC AGAAGCAAGG GATCCTGGGA GCTCAGCCTC AGTTGATCTT	120
CCAGCCTCAC CGGATTCCCC CACTCTTTCC TCAGAAGCCT CTGAGTCTCT TCCAAACATC	180
CCACACACTT CACCTGAGCC ACCTGAACAG ATTTCTGCC CGGGGCCCTC ATGGACGGTT	240
GGGCTCGAG	249

## (2) INFORMATION FOR SEQ ID NO:799:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCTAGA CCTGCCTCCC CCCCCCCTT TCAGAATAAT TTACATAAAT ACTCCTGAGT	60
TCAATTTTTT TNAATTTTTT TTCTGCTTTT ACTTATTACC CTTAAGTGC TTGCTTACTT	120
TCTCTGATAA TTTACTTTCT TCTACTCTGT GATTTCCTTT ACAATCAAT GAAATGGTGT	180
TGTCTTGTTT TCTCAAGTTT TTTCCTGTTA CCTTTCCTGT GGTCACTGG ACATTCCAGT	240
CCGTTTTCCA CACTCTCCCT CTACCTTCTC CCCAGTTCT TTAAGAGAC ACATAATCTC	300
GAG	303

## (2) INFORMATION FOR SEQ ID NO:800:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GAATTCGGC CTTCATGGCC TAGCCATGCA ATATCTTTTG CATTACAGTG CAGTCTTTGA	60
GAAGAGCCAA GTGGGTGAGA GGTATATTTT CGGTGGTAGT TGAAGAGAAG GACAAATTAG	120
CACAGGAACA AGAACTTCAT GTAGTTGTGT TTGAAGGCAG TAGAATTGCC TTTTAAAAGT	180
CATATCTGGA TGTTAAGCTC TCTCTGGGAT CCAGTTATTA GGATGAAGAA ATTCTGCCGT	240
TTAAGTGCTT GCCATTTATA GAGGTGCTT GTAACCTGTG TGGCTAGGTA ATTGTGCTGT	300
GTGAATTTTC TACTCAAGGT TGGTTTGCCA GAAAGTAGAA TTCTGAGTCT GGGTATAAAG	360
GGGTTTACTA ACATGGGAGA GATTGTGTG GAACCCAAAC TCGAG	405

## (2) INFORMATION FOR SEQ ID NO:801:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```

GAATTGGCCT AATTAGCATC CTC AAGGACA CCAAAATCAC GTGTGAGGAG AAGATGGTGT      60
CAATGGCCCC AAACACGTAC GGGGAGTCCA AGGGCCGGTG AGGGAGGGTA TTGCCCTCCG      120
TGAGCACAGA GACTCTCCAT GGGAGGGGGA GCAGTATTCT CCTGGATCCT GGGGCTGGG      180
TGGGCTGGGG GACAGCTGAG GATGGGCCTA GCAGATGAAG CTTGCCAGCA AGGCCAAAGC      240
AAACGGTTTC TCCTGTGGAT AGTGGACAGA GACCTTTGTA ACCAATGGAA TTATTCATT      300
TTCTCTATCT TTTATTTTTT CAAAGATATT ATTTGACTCT ATCAAAAGTC TCTCCTTTT      360
AAACCTTTTC TTATGGCGGG CTATCTCGAG                                     390

```

## (2) INFORMATION FOR SEQ ID NO:802:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```

GAATTCGGCC TTCNTGGCCT ACTTTTGAC CTTCTGAGTT TTAGTTGTG CACTGAGTTT      60
TAGGTNAAAA AGAAAAAAA AAAGGAAAA TTATCTGTAA CCTCAAGACT TTTTATGAGG      120
ATTATGATTT TACTGTGTTT GATAATAAAT GCCTTTTGCA TGCACTGGTT TTCAGCATAC      180
AGTTTGAAC ATTTCTAGT GGATGAGCTT AAAAAAGGG AAAAGCTCGA G                231

```

## (2) INFORMATION FOR SEQ ID NO:803:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```

GGGACAAGGA CCTGTGCAGT GCGTGACAT GACAGACGGA CCTGNTCAGC GTCCTATTG      60
CAGTGATGTT CGAGTTTAGC CACCGTACTG TGGACATGCA CCCAGACAGC GGATTAAACG      120
TTAGTGTGTA CCCTATTCCC AGAAGAAAAG GTCCAAGAAA CACCCACACA GATCCCAAAT      180
GCAGCACACC TGTGTGTGGG CCTTCATCTT TTGGAGCCCA CCAATGCCTG CCATCCCTAA      240
CAACTGCCTT CGCACCCACC AGGGATCAAG GCATTCTGTT TTTCGGAACG TGCTCCGACA      300
GTGGAGAAGT GCAGCATGGG AAGGTTGTAT CTAGGAACCT GAAGCAAATA AATTCCTTTT      360
AATTCATGCT TGTGATCCCT GTTATTCTGT CTCTGAACCT TGCCTTTATG CTCCAGATTA      420
GCTTTGAATC TTATTGCTAG ATTCTCAAT CTGTTTACAA AATAAATGCA CCTAATCTTC      480
GCCTGCCTCG AG                                     492

```

## (2) INFORMATION FOR SEQ ID NO:804:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 444 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```
GATACATAGT TCAATTCAGT TCAATCAAAA CCATTCAATA CATATTTACT GAGTCCCTTC      60
TGC GTGTCAG GCACTGTTTC AGGCACTTGT GATATATCAG TGAAAAAAC AAAGGCCCTT      120
GCCCACATGG AGCTTACATT ATAGCCAGGG GAAACAACAG TATACAATAA ACACAAATAT      180
GTGAAGTATC TAGGGTGATA GGTGATATGA AAAACATAGA GCAGGTGAAA GGGGTATGGG      240
ATTTCTCGAT CTGGAAGGTA GACAGCTGCA GTATTAATAA GTATGGACAG GATAGGCTTC      300
AGTAAGAAGG CAACAATTGA GCAAAGATGA GTAGGTAAGG GTATAGGGCA TCTGCAACAG      360
CTAGTGAAAC GGCCCAAAGG TTAGAACAAG GCTGGAGTTC GGGAGAGGTC TGGGCTGGAG      420
ATGTAGNCCA TGAAGGCCGA ATTC                                         444
```

(2) INFORMATION FOR SEQ ID NO:805:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 352 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```
GAATTCGGCT TTCATGGCCT ACAAGAAGCT GGAGGAAAAA AATACGCTGG CTCAGGGCTT      60
TCAGAGAAGA GAGGAAAATG GTACAGGAAG ATGAAAAAAT TGGCTTTGAA ATTTCTGAAA      120
ACCAGAAGAG GCAGGCTGCA ATGACTGTGA GAAAGTCCC TAAGCAAAAA GGTGTCAACT      180
CTGCCCCGTT CAGNTCCTCC TTCTTACCCA CCACCGCAGG ACCCGTTAAA CCACGGCCAG      240
TACCTGGTCC CCGACGGCAT CGCTCAGTCG CAGGTTTTTG AGTTCACCGA ACCCAAGCGC      300
AGCCAGTCAC CATTTTGGCA AAACCTCAGC ATGTTAACCC CCATCACTCG AG              352
```

(2) INFORMATION FOR SEQ ID NO:806:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 272 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```
GCACCCCGGG AGCTGAGTGA TTGCAGAAAC TGGCCTTCCA TCTCTCTCAG ACACCAAGCT      60
GCAGATCCAG GCTTTTCTGG GAAAGTGAGG CCACCATGGC TCTGGAGAAG TCTCTGTGCC      120
GGCTCCTTCT GCTTGTCCTG ATACTGCTGG TGCTGGGCTG GGTCCAGCCT TCCCTGGGCA      180
AGGAATCCCG GGCCAAGAAA TTCCAGCGGC AGCATATGGA CTCAGACAGT TCCCCAGCA      240
GCAGCTCCAC CTACTGTAAC CAAGGTCTCG AG                               272
```

(2) INFORMATION FOR SEQ ID NO:807:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

```
GCCTTCATGG CCTAGGAGAA GAGCGGAGCG TGTGAGCAGT ACTGCGGCCT CCTCTCCTCT    60
CCTAACCTCG CTCTCGCGGC CTACCTTTAC CCGCCCCACC CTCAGGAAC TTTGTTAGGA    120
AAAAATTGAA AGAACTTAAG TCTCGAATGT AATTGGAATC TTCACCTCAG AGTGGAGTTG    180
AAACTGCTAT AGCCTAAGCG GCTGTTTACT GCTTTTCATT AGCAGTTGCT CACATGTCTT    240
TGGGTGGGGG GGAGAAGAAG AATTGGCCAA GCTCGAG                                277
```

(2) INFORMATION FOR SEQ ID NO:808:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 279 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

```
GAATTCGGCC TTCATGGCCT AAACACAGAA AAACCAACTT TCTGATACCT TTCTCCCTGT    60
ATGTTTATCT TCTTTGTCTA GTTTTTCAGC AGAAATATGC CCGTTTCCCC CTGATAATTC    120
CCTTCCTTAG AGACAGCATA ATTGTAGACC TGGCCAGAGA AATGCTGAAA ACAAAGGGAA    180
CCCCCTTGAG CCCAGCCCTT CACCTGCTCT TAGCACTTCT TCAGAGGTTT ACTCTGGAGT    240
GAATGAAGTA GTGTGACCAG AACTCTCTGG CACCTCGAG                                279
```

(2) INFORMATION FOR SEQ ID NO:809:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 247 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

```
GAATTCGGCC TTCATGGCCT ACCTTCGCCT TCTGTCTTTC TGCCTCCTAC TAGCAGGTGT    60
TTA CTCCAAT TCCTATGGGC CAGAGTTTGC TCACTGCAGA GAAATACAGT GGAATTCGCT    120
GGGCAATGGT TTGGCTTATG AAGACTTTAG TTTCCCCATC TTTCTTCTTG AAGATGAAAA    180
TGAAACCAAA GTCATCAAGC AGTGCTATCA AGATCACAAC CTGAGTCAGA ATGGCTCAGC    240
ACTCGAG                                247
```

(2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 561 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```
GAATTCGGCC AAAGAGGCCT ACCCGGGCTC AGTGTGCCGA CTTCTGACTG CAAATGATCT    60
CATTTTCTAA AATCTTTCTC CCATTCTCCT TTAAGAAAAA ATCTTAGTTA TTAAAAATCT    120
GCCTCACAAA CTTAGAAATG CTTCAAGAGTA AGTATCTGAG AAGCAAGCCC ACCCCACATC    180
CACCATATAT CATCGTTTCT GTTAAGGGCC ANCCCATTTT TTCAGACAAA TTCTATCTTC    240
TTCCTCCCAT CCCACTTACT TTTGACTTTG AAGGTGGATT ATCTCATCTC AAATTTTCCT    300
NCCAGAATAG NACCACATTT CAGCAAAATA TTGGGTGGCT GGTTCCTTTT TCACAGACCC    360
ACCTGCATCT GTGTTGGTCC TCTATGTGAG GAAGGTCCTC TATGTGAGAA GATCTGAGGG    420
GTAGGCAGGT TTTAATGGAC TAAGATTTTT TTTATATGTA TAAGGGGGGT GGGAGGAGGA    480
TTTtagaaaa CTAGATCCAT TGGCCTGCAG TTAGAAGTCG AACACTGAAC TTGGGAAGGC    540
TTTCTGTGGC CGAACCTCGA G                                         561
```

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```
GAATTCGGCC AAAGAGGCCT ATCAATTNGT TTTNTTACTT GGACTGTGA TTTATTATNT    60
NTAATTATNG TNAANTNNTA AAGCTCAATT TTACCAGCTT CAGCAGTTTT AAGTGTATAG    120
TTGCACAACA CNACATAACT CATCTAAGGT GAATTATACT GTAATTTTCT TTTNGTGCCT    180
AGCTTTTTGC NATTACCATA GTATCTGAA GTTTTGTGAT TGTNGTACCA TGAGACAGGA    240
TGTATAAGA TTAATATTTC AATGTATATA TATGCCTAGC ATATTTTCNT TATGCATGCA    300
GCCACTCGAG                                         310
```

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```
GAATTCGGCC AAAGAGGCCT AGGCGGCAGG AGGCAGTGGC GTTGGTGGGA AGCGCAGCTC    60
GAAAAGCGAT GCCGATTCTG GTTTCCTGGG GCTGCGGCCC ACTTCGGTGG ACCCAGCGCT    120
GAGGCGGCGG CGGCGAGGCC CAAGAAATAA GAAGCGGGGC TGGCGGCGGC TTGCTCAGGA    180
GCCGCTGGGG CTGGAGGTTG ACCAGTTCCT GGAAGACGTG CGGCTACAGG AGCGCACGAG    240
CGGTGGCTTG TTGTCAGAGG CCCCAAATGA AAAACTCTTC TTCGTGGACA CTGGCTCCAA    300
GGAAAAGGG CTGACAAAGA AGAGAACCAA AGTCCAGAAG AAGTCACTGC TTCTCAAGAA    360
ACCCCTTCGG GTTGACCTCA TCCTCGAG                                         388
```

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

```
GAATTCGGCC AAAGAGGCCT AAGCAAGCTC TGCTTTAGTT TCCAAGAAGA TTACAAAGAA    60
TTTAGAGATG TATTTGTCAA GATTCCTGTC GATTCATGCC CTTTGGGTTA CGGTGTCCTC    120
AGTGATGCAG CCTACCCCTT TGGTTTGGGG ACATTATGAT TTGTGTAAGA CTCAGATTTA    180
CACGGAAGAA GGGAAAGTTT GGGATTACAT GGCTGCCAG CCGGAATCCA CGGACATGAC    240
AAAATATCTG AAAGTGAAAC TCGATCCTCC GGATATTACC TGTGGAGACC CTCCTGAGAC    300
GTTCTGTGCA ATGGGCAATC CCTACATGTG CAATAATGAG TGTGATGCGA GTACCCCTGA    360
GCTGGCACAC CCCCTGAGC TGATGTTTGA TTTGAAGGA AGACATCCCT CCACATTTTG    420
GCAGTCTGCC ACTTGAAGG AGTATCCCAA GCTTCTCGAG                                460
```

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 225 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```
GAATTCGGCC AAAGAGGCCT AAAGTGCTTT AAAACAATTT TTCACTGTGG ACAACCGAAG    60
ACCACAAAAC ATTTGAGAAC TACCATGACA GACAGAGAAC AAAATTACAA AACAGAAAAA    120
GTTAAAAAAC AGGAGAACTG CACCACTGCA CTCCAGTCTG GATACCAGAG AGAGACTCCA    180
TCTCAAACAA AACAAAACAA AACAAAAAAA CCCCAAAAAC TCGAG                                225
```

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 140 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```
GAATTCGGCC AAAGAGGCCT ATTTATCGTT TAAAAAAGTC AGTAGAACTA AACATGAAAG    60
TGATTCTTCT GATTTTITGG GGGGTGGTTA TTTGCACATG GAAACAACAA CAAAAATGCT    120
TCAGATACAA TTTGCTCGAG                                140
```

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 540 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GAATTCGGCC	AAAGAGTCCT	AAAACCAACA	AGCCAGGCTG	ATTTTCTAGA	GGGATCAGTG	60
ATGTGGGGTA	CAATGACACC	TTCCCTGTGG	CTTGTTATGC	CTCCGGTTTT	GTTTTTGAAT	120
CTTGGTTGCT	GGTGGGGTAT	TGCCCCCTCG	GCTCCTCTAT	GCTTTCGCGT	GTGTGAAAAT	180
GCAGGAGTGG	ACCACTGTGC	ACAGCAGGAC	CATGGCTGTG	AGCAGCTGTG	TCTGAACACG	240
GAGGATTCCT	TCGTCTGCCA	GTGCTCAGAA	GGCTTCCTCA	TCAACGAGGA	CCTCAAGACC	300
TGCTCCCGGG	TGGATTACTG	CCTGCTGAGT	GACCATGGTT	GTGAATACTC	CTGTGTCAAC	360
ATGGACAGAT	CCTTTGCCTG	TCAGTGTCTT	GAGGGACACG	TGCTCCGCAG	CGATGGGAAG	420
ACGTGTGCAA	AATTGGACTC	TTGTGCTCTG	GGGGACCACG	GTTGTGAACA	TTCGTGTGTA	480
AGCAGTGAAG	ATTCGTTTGT	GTGCCAGTGC	TTTGAAGGTT	ATATACTCCG	TGATCTCGAG	540

## (2) INFORMATION FOR SEQ ID NO:817:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC	ANANAGGCCT	ACTNNNAGGC	CTGTGCANAN	GCGTTGGGTN	CTGANGTGAC	60
AGCTTTCCCC	NTCCATGGGA	CNCNTTTCCA	GACNNTCGNC	ACNTCTNCTG	AGGTGAATTN	120
NCTGTGGGTN	TTANGTCTGG	GGTGGANNTT	CTCTCTCCCC	NNNTCTNACT	TCNGTAGATG	180
TGGACCTNGN	CCNNC NNTCC	ATTGGTCCNC	TGCCCTGTGT	CTCCAGGGTG	CTGCCTCTGC	240
CTCCTCATAT	CACCAGCGTC	CCCACTGCCA	CTAGTCTGTA	GGGGGATTCC	GGGCTAGGTG	300
CTCTTCCCAT	TCGACTTCAA	CCAACTTATA	TAGCTCCATG	GTGGCCTGGG	CATCTTCCAC	360
AGAGGATGTC	CGCTCTTCCC	NACCTGGATA	TCCCGGTTTA	GCAGCTTCTT	GGTGAGATGC	420
TTCAGAGACA	TGGTGGCATT	CTCCGGGCAG	TCAGCCTTCC	GGTTGAGGGG	GGGGATATGG	480
GAGGTGTAC	GGGTGAGGGA	CTTGGGGTGA	AAGTACTGAA	GGGCTTTGAA	GTGCTTGTGG	540
ATGGCATGCC	CCACCACTAT	CTTNCCCTGT	GAGTATCTTC	AAGATCTGCC	CCTCGAG	597

## (2) INFORMATION FOR SEQ ID NO:818:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GAATTCGGCC	AAAGAGGCCT	AGGAAATGAA	ACGAATGCAT	AAAGCTCTCC	AGAAAGATCT	60
GCCAAGACCA	TCAGAAGTAA	ATGAAACTAT	TCTAAGACCC	TTAAATGTAG	AACCGCCTTT	120
AACAGATTTA	CAGAAAAGTG	AAGAACTAAT	CAAAAAAGAA	ATGATCACAA	TGCTTCATTA	180
TGACCTTCTA	CATCACCCCT	ATGAACCATC	TGGAAATAAA	AAAGGCCAAA	CTGTAGGGTT	240
TGGTACCAAT	AATTCAGAGC	ACATTACCTA	TCTGGAACAT	AATCCTTATG	AAAAGTTCTC	300
CAAAGAAGAG	CTGAAAAGG	CCCAGGATGT	TTTGGTGCA	GAGATGGAAG	TGGTTAAACA	360
AGGAATGAGC	CATGGAGAGC	TCTCAAGTGA	AGCTTATAAC	CAGGTGTGGG	AAGAATGCTA	420
CAGTCAAGTT	TTATATCTTC	CTGGGCAGAG	CCGCTACACA	CGGGCCAATC	TGGCTAGTAA	480
AAAGGACAGA	ATTGAATCAC	TTGAAAAGAG	GCTCGAG			517

## (2) INFORMATION FOR SEQ ID NO:819:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 332 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```
GAATTCGGCC AAAGAGGCCT ACTAAATTCT CATATATCTG TGTTCCTAGA ATACTTTGCC      60
TTTTTGGGCT TAGTTAATGG TAAGATTCTC ATGTCTGTCT ACATAGGAAT ACTCCACCGT      120
ACAGGACACT GCTTTCCTGGG TTTAGTTCAT TGATAATTTG TCCGAATGCT CATAAACATG      180
TCTATAGGAA TACTCCAATA TATCTAGGAC ACAGTTTCTC CCGCTCCTGA ATACAGGCAG      240
ATTTTGTTC TTTCTGCCTC CCTGTGTTAA TGAGAAGGTA GTCCAGCAGG TTCTCTCTAC      300
CTCCTTGCTT TTTTTCCTCC TTAATGCTCG AG                                     332
```

(2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 340 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```
GAATTCGGCC AAAGAGGCCT AACCTGCTCC GTGGAGCGCC TGAAACACCA GTCTTTGGGG      60
CCAGTGCCCTC AGTTTCAATC CAGGTAACCT TTAAATGAAA CTTGCCTAAA ATCTTAGGTC      120
ATACACAGAA GAGACTCCAA TCGACAAGAA GCTGGAAAAG AATGATGTTG TCCTTAAACA      180
ACCTACAGAA TATCATCTAT AACCCGGTAA TCCCGTATGT TGGCACCATT CCCGATCAGC      240
TGGATCCTGG AACTTTGATT GTGATATGTG GGCATGTTCC TAGTGACGCA GACAGATTCC      300
AGGTGGATCT GCAGAATGGC AGCAGTATGA ATACCTCGAG                                     340
```

(2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 518 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```
GAATTCGGCC AAAGAGGCCT AGGAGCTATA ATCTTGTAAC AGAGTCTACG TGATTGTAGG      60
ACAATAGGCA CCACACAAAT ATGAGGAAGC AGGTCAGAGA GCGGGCTGAC TTAATGATTA      120
ATGCTGAATG TGCTACAAGC TTGTTTCATT TTCATTTCTC CTCCTCCCTT TTTTCCTGAT      180
TAATTTAATA AAGTTCATAG GGGAGGCTTC AAACACATGA GAAATTAAAA CCTTTATTAC      240
CAGAGTCAGA GCCTGACTAT ATTGATTGAG TGAAGCTTTC CTTTATAAAA TGCAAAGCAT      300
GTAAACAATT CCAACACAGT AACATATTCA TGAGTTTTTA AATTCATGAG TTTTAGAGAA      360
AATATTTTAC TTAACACCAG CACTTGATGA TCTCTGACAA TGTTATGTAG CCTGAACCTG      420
GAGTTTTGGC TGATGGGTTG TCTCAGCCTG TGACAGGTTT TAGCTGGCTT TGGTTCATCT      480
TGTATCACAC CCCCACTC ACATGCTCAC CACTCGAG                                     518
```

(2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

```
GAATTCGGCC AAAGAATTCT AGACCTGCCT CGTGCCTAAG GCAATTGAAT CGAGGGTTAA      60
GGGTTTCATCT TGCTAATGTC AAAAGTGACA CTAACAAGAT TCTTAGCCTC ATCCGCCAGA      120
TGACGGGCCT CCGCTCGAG                                     139
```

(2) INFORMATION FOR SEQ ID NO:823:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

```
GAATTCGGCC AAAGAGGCCT AAGATGAGAA AATCAAGGTT CTTAGATGTT CTGGAATTG      60
TTCATTTTCA CATGATTGGA ACATTGTGGT CTGTCTTTC AAGTCCATGT CTACCATACT      120
CCACAGACCC TTTTCTGTCC ACTTTGTAC CATAAATTCT GAACTCCAAT ATAAAGACTT      180
CACCGTATTT GAAAGAGAAT AGTGGGAAGT CTGATGCTCA ATTTTGTGTA CAGAACAGTT      240
GCCTCTGTGA CATTGTAAC TCTGAAATAA GAAAATCCCC TTTTGATTCA GGAGCTCTCG      300
AG                                     302
```

(2) INFORMATION FOR SEQ ID NO:824:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 291 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

```
GAATTCGGCC AAAGAGGCCT AAATCAGCAG TGAATCAGA ATCAATTGAG TGACATNGAG      60
TCAGTAAATC TCTGACTGCC TCAGTTACCC CATATGATAG TTTTGAGGAT GGGAACATTG      120
AGAGAGTTGA TTTGGAAGCA TATCAAGAGT AAAAATTCCA ACATTTT TAG TTCCTTTAAG      180
TTAAATCCAG GCACTGTCTT TTCCTGCAAG TCTCCTGTT CTTTCAGATT GCACAGGTGA      240
GAGTGCTCAG ATTAGGGCTG GAGGTTGTAA ACCATTGCTC CCGTCCTCGA G          291
```

(2) INFORMATION FOR SEQ ID NO:825:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 545 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```
GAATTCGGCC AAAGAGGCCT AAGCTTTTTT TTTTTTTACA GACTTCACAG AGAATGCAGT    60
TGTNTTGACT TCAGGTCTGT CTGTTCTGTN GGCAAGTAAA TGCAGTACTG TTCTGATCCC    120
GCTGCTATTA GAATGCATTG TGAAACGACT GGAGTATGAT TAAAAGTTGT GTTCCCAAT    180
GCTTGGAGTA GTGATTGTTG AAGGAAAAAA TCCAGCTGAG TGATAAAGGC TGAGTGTTGA    240
GGAAATTTCT GCAGTTTAA GCAGTCGTAT TTGTGATTGA AGCTGAGTAC ATTTTGCTGG    300
TGTATTTTAA GGTAAATGC TTTTGTTC TTTCTGGTGG TGGGAGGGA CTGAAGCCTT    360
TAGTCTTTTC CAGATGCAAC CTAAATCA GTGACAAGAA ACATTCCAAA CAAGCAACAG    420
TCTTCAAGAA ATTAACTGG CAAGTGAAA TGTTTAAACA GTTCAGTGAT CTTTAGTGCA    480
TTGTTTATGT GTGGGTTTCT CTCTCCCTC CTTGGTCTT AATTCTTACA TGCAGGGAAC    540
TCGAG    545
```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 91 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```
GAATTCGGCC AAAGAGGCCT AGGTGGTGA ATCAAGGCCA TGAAGGACCT GTTTATGCGG    60
TGCATGCTGT TTACCAGAGG AGGGCCTCGA G    91
```

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```
GAATTCGGCC AAAGAGGCCT ACTAAGAAAT GCTATTGGAT CTTTAGTTTG TTCAGCTTTA    60
TTTTTCTTAT AAGGATGAAA GTGTTGACTT ACAAGCTCTT TATATATCAG ACCAGAAACT    120
ACTTTTAA AAATATAAAA TGTAATCACC ATCTAAAGCA CTNGCACA TGCATGGCAT    180
GTAGTGAGCA CATATTTT GCTCTTACTG TTATTTATTA TTATTCCATT GAGAAAAACA    240
TTTCCTAATA ATAATGAAAT GACAACATGA TATGGTAGCA TCACAAAAAT CAATACATCT    300
TTCTAAACAT ATTAGAAATT ATTTCTGTAT GAAATAACAG GTTTAAGGAA AAAATTTAAT    360
GTGGTCAGAA GTGTGCAATC AAAATAATGA GATGACATTG GCATGAAGAA CAAACTCGAG    420
```

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (X) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC AAAGAGGCCT AGAATTCTAG ACCTGCCTCG AGCTTAGGGT GACAGAGTGA	60
GACTCCGTCT CAAGAACTAG AAGAGTCCTG AAGTTCTTTC TGGAGTATTG GTGTGATAGA	120
AGCATTAGTA GTTCTTTTA TGTCTGGAG AACTTCTGTG CACATAAATG TTTATAGATA	180
TATACCCCGT TTGTATACCA AAGGAATCTT CATTATTTT CACTGAACAA AACACCTTAG	240
AGAACATTTT GTTTGTTTG CCAATCAATC TAATCTTTT AAATGACCAC ATAGTATCCC	300
ACGGTAAGTT TTTTGTGTTG TTTTTTTAA AATCATGATT TGTTTAAACA TGTCCTATTG	360
CTCTCGAG	368

## (2) INFORMATION FOR SEQ ID NO:829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AATGTTTTTC AATACCTCAG TATATTGTAG GGACTTGTTG	60
GAACCTTGTT GAATGAATAT ATTGTTTACA GTTTACCATT ACTCAGTATT TTAGTTGTCA	120
CATCTTAAAA TAGATAATCA TTTTACCAT CACACTCCCT TCATAAGATA TAGAAATAAA	180
GCCCTTCTTG TTTGGAAATG GTGGTATTTT GGTTTTACTT TTTTAAAGT TACTGTTGTA	240
AGGTACTACT TTAATATTTT TATTTAACTT TATTTGTTG TCTTTAGTAG GACTAAGCTA	300
ATGAGAGCTT TGACTTGCTT AAACGTTGGG CAGGAAAACG CGAG	344

## (2) INFORMATION FOR SEQ ID NO:830:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGTCT AGAAGACTTT TGTATTTTGG ACTTTGCTAG TTTGTGGCAG	60
AGTGAGAGAG ACGGGTGGAT ATTTCAAATT TTTTGTATAT AGCGTATCGC AAGGGTTTGA	120
CACGGCTGCC AGCGACTCTA GGCTTCCAGT CTGTGTTTGG TTTTATTCT TATCATTATT	180
ATGATTGTTA TTATATTATT ATTTATTTT AGTTGTTGTG CTAAACTCAA TAATGCTGTT	240
CTAACTACAG TGCTCAATAA AATGATTAAT GACAGGATGG GGTCCCTG TGCTTTTACC	300
AGTAGCATGA CCCTTCCTGA AGCCATCCGT AGAAAGTACC TTGTCCTCGA G	351

## (2) INFORMATION FOR SEQ ID NO:831:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GAATTCGGCC	AAAGAGGCCT	AAAACAAGAT	CCACTGGAGG	GTCATGTCTG	AGTTGTTCTC	60
TTGATGATT	TGGCTGATTA	TCTTAATGCC	CTTTCCATT	TCTGATGCTC	TTGTTCTACA	120
TTTTGGGTGA	AAATACCAAT	ATTTCTAATT	CTGTATCACA	TCATCTCACT	GTGTAGCAAG	180
GCAGGTCTCC	ACAAATTACC	CCGTTCCACC	TGGAGAGCTC	CTTATTGACT	TAACGTGATA	240
TTCAGCCAGG	TTTTTCTTCC	TGTAATAGTT	GCTTTGCCTT	TAGCAAATTG	CCTGGATCAT	300
TGACCTTTCT	TAGCCCATGC	ATAAAATGCC	AACTCGAG			338

## (2) INFORMATION FOR SEQ ID NO:832:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	AAAGAGGCCT	AATATTATAG	AACCACCATA	TGTACATTTT	TCATAGAGTT	60
TGGGAATGAA	ATAGTAAAG	GTATATAGAA	AACTAAGAAA	AGGGAAAATT	CTGGGGGGCT	120
GGGATGAGGA	AGTGATTAGC	ACCAGGGAAA	ACCAAAGTTT	ATACCAGAAA	GGAACCTCTAA	180
TATTAGGCTG	CCATATTAAG	CCATGTGGCT	GGGCTACATT	GTGTTAAGTC	ACTGATGAAT	240
GATCTAAACA	AGAGTCTGGA	TATAACCAAA	TCAGGAAGGC	TTGAAGAATG	TGTGTGTTAT	300
TGGGGGGAAC	GGTGTCTACA	GTAGGAGGTA	GATGGTTATG	TAAACTAGA	GAAAAGGAAC	360
TAATATAAAG	TGTTAGTTGG	AATATATTAA	TAATTGTCAG	TGAAACTCG	AG	412

## (2) INFORMATION FOR SEQ ID NO:833:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC	AAAGAGGCCT	ACTGTGGGTT	TATATTGATG	TGTAACAAGT	TGATTGGAA	60
CACTGGACTC	TCATTCTGTT	ATTCTGGTTT	TGTTTTTTTT	GTGTTGTTTT	TTTTCTTTTG	120
TAAAGGCAAT	GAGCTAGTCC	CAGATCTCGA	G			151

## (2) INFORMATION FOR SEQ ID NO:834:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCAGCC	TTCATGGCCT	ACTCTCGTTG	AAGATGTGAA	TATCTGTCTG	CAGGCATGCA	60
GCAGTCTACA	CGCTCTGTCC	TCTTCCTTGC	CAGATGATCT	TTTACAGAGA	TGTGTGTGATG	120
TTTGCCGTGT	TCAACTAGTG	CACCGTGGAA	CTCGTATTCTG	ACAAGCATTT	GGAAACTGT	180

TGAAATCA TCCTTTAGAT GTTGTCGCGA TTGAATTCTA GAGCGCCTC GAG

233

## (2) INFORMATION FOR SEQ ID NO:835:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 228 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCGGCC TTCATGGCCT AGAACTGGGA GGTAGAAACA AAAATGACTG AACATCTTTT	60
TATCCCCCAA TCGTTACAAA GCCTAAATAA CTCTAAACGG GATGGGAGGG CAAATTTTAG	120
GTCAGTTGAC ATCCTGGAGA AGATATCCTA GGTCTGTCT CATTCCCTAG ACCGCATAAC	180
ACTCCAACCG TGTAGGCCAT GAAGATTGAA TTCTAGACCT GCCTCGAG	228

## (2) INFORMATION FOR SEQ ID NO:836:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCGGCT TCATGGCCTA GGCTGGTGAT CCATGATGCA AATAATAATA ATAATGATGA	60
TTTTTTTAA TGTACAGCTC TCACACAAAT TTCATTTTGT GAACACACTG GTAAGTACAC	120
GATGCTGGGG CTTCACAAAT GTGGCGTATC CCACTGATGG CTCCAACCTG CGAGTGGGCT	180
CAGTTATGAA AACTCGGGA GAGGACGGT TGTCGCTGCT CGAG	224

## (2) INFORMATION FOR SEQ ID NO:837:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCGGCC TTCATGGCCT AGGAGCTGTT GCACTTTGGG CCTTGGCAGG ACAAACACTA	60
AAACAACAAA AATATATGGC AGAACAAATT GGATACAGCT TTATAATAAA TATGCTTTTG	120
TCACCATCAG CTAAATGCA GTATGTTGGT AAGTTATTTT CCTTATTTTA TTTTATTTT	180
TTAGAGACAG GATCTTGCTC TGTTGCCAG CCTGGTGTGC AGTGGCACAA TTATAGCTCA	240
CTGCAGCCTC AAACCCCTGG GCTCGAG	267

## (2) INFORMATION FOR SEQ ID NO:838:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid

STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

GAATTCGGCC TTCATGGCCT AATCAAATC AACTACGCC CTGATCGGCG CACTGCGAGC	60
AGTAGCCCAA ACAATCTCAT ATGAAGTCAC CCTAGCCATC ATTCTACTAT CAACATTACT	120
AATAAGTGGC TCCTTTAACC TCTCCACCCT TATCACAACA CAAGAACACC TCTGATTACT	180
CCTGCCATCA TGACCCTTGG CCATAATATG ATTTATCTCC AACTAGCAG AGACCAACCG	240
AACCCCTTC GACCTTGCCG AAGGGGAGTC AGAACTAGTC TCAGGCTTCA ACATCGAATA	300
CGCCGCAGGC CCCTTCGCCC TATTCTTCAT AGCCGAATAC ACAAACATTA TTATAATAAA	360
CACCCTCACC ACTACAATCT TCCTAGGAAC AACATATGAC GCACTCTCCC CTGAACCTA	420
CACAACATAT TTTGTCACCA AGACCCTACT TCTAACCTCC CTGTTCTTAT GAATTCGAAC	480
AGCATACCCC CGATTCCGCT ACGACCATCT CGAG	514

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 291 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

GAATTCGGCC TTCATGGCCT ACTACATAGA CGTGGATTTT AGGGGGACAA AATCAACCA	60
CTACCGTCTC TTGCTTGAA ATCACACACA ATTCCAGAG GCCTAGAGAT GCCACTTTGT	120
CCGCAGATCT CTCCTGGCC CCGCCTCTGT CTGGGCAGCC TGGGTCTGAT TGTCTTCTG	180
TCTGCCACCC TCACAGTCCT CAGCCGTGGC CTGGTTCTTG TCCTGGGGGC TGACCAGCCT	240
TCTGGGGCCT GGGACCTGGG GCATCGCTGC TGCTGCCGG CTGACCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 221 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

GAATTCGGCC TTCATAGCCT ACCTAAATTA ATAATAATGT ATAGTTCAGA ATTGCTAAGA	60
GTACTTTTTT TTTTTTTTTT TTGAGACAGG TTCTCGCTCT GCCCTCCAGC CTGGTGACAG	120
AGCAAGATTC CATCTCAAAA AAGAAAAAAA ACACACAGCT AATAGAATTG CCATTGTTTT	180
TCATAATAGA ATCTAGCTGC TACTCCAAC CTCACCTCGA G	221

(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 445 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTCGGCC	TTCATGGCCT	AGTAAAGTTT	CTCTCACCCC	ACTTTAATTT	CATGTGCCAC	60
ATTTTTCCT	TTCTGAAACT	ATATTGCTTC	CCACATTCGG	ATTTTAGAAT	TTTTCTTTT	120
AAAGAGATTG	TATTTTAAAT	TATATTTGGC	CTACTTCCCC	ATTGTCAATG	CTTGTAACCGT	180
GTGAGAAGTC	CCTAGGATGA	TAGTCATGGT	TTTTTCCCAT	CTTATTAGCT	TATTATTCTC	240
CTTGCCCAAC	CCCCACCCCT	GGCAGCTTCC	CACCCTCTCT	AATGCTTCTG	GAAGCTACTA	300
AGAAGTTTAA	GTGGCCTATG	TGAAAATATG	TCAGTGTCCC	ATTTTAGCAT	ATATATGTAA	360
CATTTACAAT	TTATACCCCT	GCCTACATCC	GAGAGGGTTG	TGAGGTGGCT	TATGATGATA	420
AAGAAAAAAA	CCCACATATC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GAATTCGGCC	TTCATGGCCT	AAATTTATAA	GGTACTCTTT	AACAATTTAT	ATCAGAGTTA	60
GTTGCTATCT	TTAGCACCAT	TGTCCTGATG	GCCTCCACTT	CTAGCTATAC	ATTGCCTCTT	120
TGAAATGAGC	CATTGGGAG	GCAAATATAT	CAATTAGAAT	GCCTTAAAGA	ATAAAAAACT	180
TAAAAAGCAA	AGAAAAACAG	AATGCCTTTA	GGAAAAAATT	TAATAAAACC	AACTCAAAT	240
TGTGCAACA	AGGAAATTTT	AGTGTTCCTC	ATAATAAAAC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

GGTTCCCAAG	TAATTATATT	CCAAGGAACA	TAGGAGGGGC	AAAAATAATT	CTAAAGACAT	60
AAAGAAAGAA	ACAGGATATT	TTCTAAATAT	TTTTATCTTG	AGACAGAACT	TGGTTTTTTT	120
TTTGGCTTTA	GCTTGAAAAA	TCTCGTGCA	TAGATAAATC	TTTCTCCTAT	CTTGAAATTG	180
GTCTTATCAA	GGAACACCC	GCATTGAGAT	ATGAAGCTCT	GGGCCTCTCT	GGTAGCCTTG	240
CACACCCTTC	ATTCATCACC	TGGTCCCCCA	GATAAGACAG	CCCTGACCTC	AGAATACACC	300
TTGGATTAA	CATTCTATGG	GACATTATT	TCTAGTCTAC	CCCCATCCCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) S CE DESCRIPTION: SEQ ID NO:844:

```
GAATTCGGCC TTCATGGCCT AGTGGAAAA ATAAGATATT TCTTAAAGTA ACAAGGCCTG    60
AATAAATGTG TGGCAGTCTC AAATTCTATT CTATATCTCA GGTGTAATCC TTACATACTA    120
AAGATAGTGG GATCATCCTT GTAGATTCTT AGCAGACTGG TACATTAAAA AGTGACAATG    180
TTTGGGGTAT GACAGTATAA AAAAAGGTTT AATTGAGAA AAAGGATTAA GTTAAATAGT    240
AAACTTAGTG TGAGATTTTA ATCACAAGTA CAAAAGAGTG AAGAGCAGCC TTCATGACAA    300
GGAATCATGT GACCAGCCCC CACCCCAAAC TCGAG                                335
```

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 365 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```
GAATTCGGCC TTCATGGCCT AAGAAAGGGT GGGAACTAAC ATTGATCACA TTTATGGAAA    60
CCTGCCTTCT CGTGCTGGGC ACTTTATATA TGTATCTCC CTTTGTGGTG CAATCTCATG    120
ACATGCAGTC ATTGTCCATG TTTGTGGGTG AGGAAACAGG CTTAGGGGTG GGAGGCTCGC    180
CTGAGGCCCC ACACTGTTGG CTGGAGACAG CGTGGGGCCT GAGTCTTGCT CACAGCCTGA    240
ACGCTGCACT CTGCTGCTCC GCGTCCCAGG AAGGAAAAGC TGCTGCAGTG GGTTTGTTTT    300
GCCAATACA TGGAGGCTTT TTTCTGGGTG AGTCCCCAGC AGTTGATTGT TCTGTATGCC    360
TCGAG                                365
```

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```
GAATTCGGCC TTCATGGCCT AATCCATGTT GTACAACTGA AATATAAATA ATTTTGTCAA    60
TTATACCTAA ATAAACTGG AAAAAATTT CTGGAAGTTT ATATCTAAAA ATGTTAATAG    120
TGCCTACCTC TAGGAAGTGG GCCTGGAAGC CATTCTTACT TTTCAGTCTC TCCCATTCTG    180
TACTGTTTTT TGTTTACTT TCGTGCGCTG CAGGTCTAGA ATTCAATCG                229
```

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 575 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

GAATTCGGCC	TTTCATGGCCT	AGGGGAGAGT	ATCATCTCAC	CAAGGGTGAA	AATGGCATT	60
CGGACATCAG	GACATCTCTT	ACTGGGAGTA	GTTTGAATCT	ATCACAGGAA	AGCCAAATAC	120
CTTCTTGCAG	ACTGTAATGA	AGCATTTCATT	AAGATAAAGA	TGGCTTTTCG	GCCAGGTGTG	180
GTTGACCTGC	CTGAGGAAAA	TCGGGAAGCA	GCTTATAATG	CCATTACTTT	ACCTGAAGAA	240
TTTCATGACT	TTGATCAGCC	ACTGCCTGAC	TTAGATGACA	TCGATGTGGC	CCAGCAGTTC	300
AGCTTGAATC	AGAGTAGAGT	GGAAGAGATA	ACCATGAGAG	AAGAAGTTGG	GAACATCAGT	360
ATTTTACAAG	AAAATGATTT	TGGTGATTTT	GGAATGGATG	ATCGTGAGAT	AATGAGAGAA	420
GGCAGTGCTT	TTGAGGATGA	CGACATGTTA	GTAAGCACTA	CTACTTCTAA	CCTCCTATTA	480
GAGTCTGAAC	AGAGCACCAG	CAATCTGAAT	GAGAAAATTA	ACCATTTAGA	ATATGAAGAT	540
CAATATAAGG	ATGATAATTT	TGGAGAAGGC	TCGAG			575

## (2) INFORMATION FOR SEQ ID NO:848:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 539 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

ATCCTGGAGT	GCAAAAATAA	AATCCACTCA	AGAGTCACAA	GGCCCCGCTGT	GCATAATCGG	60
TTTCACTTTT	ACCTTTTTTT	TTTTTTTTTT	TTTTNGAGAC	AGGTCTCACT	CTGTCAACCA	120
GGCTGGAGTG	CAGTGGCACA	TTCTCGGCTC	ACTGCAATTC	CGCTTCCTGG	GTTCAAGTGA	180
TTCTCCCACT	TCAGCCTCCC	AAGTAGGTGG	GATTACAGGT	ACTCACCACC	AGGTCACAGT	240
AACTTTTGTA	TTTTTAGTAG	AGACAGGGTT	TCACCATGTT	GGCCAGGCTG	GTCTCGAACT	300
CCTGACCTCA	GATGGTCTGC	CCACCTCCGC	CTCCCAAAGT	GCTGGGATTA	CAGGCGTGAG	360
CCACTGCGCC	CGGCCACTTT	CACACTTTTT	ACAGTGAGTG	GTGAATTAGC	AACAGTAACA	420
CTGATTATCC	AACATATATT	TTGGAATATC	TACTATGTGC	AAGGAATTTT	TCTTAAACTC	480
TAAGGTTATG	AATCACTGGG	CAAATCCATA	TAATTAGAGA	ATTTTAAGTG	CGTCTCGAG	539

## (2) INFORMATION FOR SEQ ID NO:849:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 193 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

GAATTCGGCC	TTTCATGGCCT	AGGGGGAAGA	CGGGAAGCAT	ATAAATAAAC	AAATAATTTT	60
TAAAGCAAC	TTTTTTAAAG	CAAGTGGGAG	GGGCATGCTA	GTTTTAAGAA	CTGTAATAAA	120
AAACACCACC	CATGTGTTTT	TTTTTGTTT	TTCTTTTGG	AGACAGAGTC	TTGCTCTGTC	180
ACCCAGTCTC	GAG					193

## (2) INFORMATION FOR SEQ ID NO:850:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCTAGA	CCTGCCATGG	CTGTGGGCGC	GCTCCCCTCT	GACTGCGTCC	CCTTCTCTCC	60
CTGCATCCCC	TTCTCTCCCT	GCATCCTTCT	GTCTTCCTGT	GTGCCCTTAT	CTGCCCTGGG	120
CTTCCTGTCT	TCTGTATCT	TCTCACCTGC	CTGTGTTGTT	TCTAGCTGTG	TCTCTGCCCT	180
TCCCTGTGTC	ATCATGCCCT	TCTGTGCACT	CCTGTCTGAC	TGTGGCCTCT	TGCTTTCTTG	240
TGTCCCAGCA	TCCACCTGCG	TCTTCCTATC	TGCACGTCCC	CTCGAG		286

## (2) INFORMATION FOR SEQ ID NO:851:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GAATTCGGCC	TTCATGGCCT	AATCTCGTTC	TCCATGTCTT	CCGTGTGCTG	GATACACTGG	60
CAGAGCTCAC	AGATGAGAAA	CGCCCCCAGG	GTGGCCTCCT	CGTGGTTGTC	CTGGATGTCC	120
ACATTGACCA	CGTGACACAG	CTGGCAGGTC	TCTGTTCCTC	TGGAATTCAG	ATCTTCCACC	180
ACCTGGTCAT	ACACTCTCTC	TTCGCAAGTG	AGGATCAGAT	CAAACAGGTC	TTTGCAGTTC	240
TGGAATCTTT	CTGGCCGGGG	CTGATTCTC	TTATTTCTGT	CCAGCATATG	TAAAAATCCA	300
TTCTGTGTAT	AGAGTTCTTT	GTCTTTCCTA	AGAAGATCAT	TGTACATCTG	GTCATATGTG	360
GTTTTGAAAT	CATAAACATT	GGGCTTGTCG	GGAGCTGGTC	CTGGAAGCTT	CACGTGAGTC	420
CCTGTTCCAA	AGGATCGGAC	GCTGAATCCC	CGTTTGCTGA	GGATGTTGTG	CGCCTCCATG	480
CTCCGGTTCT	GGTGTCTCGA	G				501

## (2) INFORMATION FOR SEQ ID NO:852:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCGGCC	TTCATGGCCT	AAGTTGTGCT	GACACCAAAC	ACATCCAGTT	TATAATCAGT	60
ATATTGGAAA	GCTGGTATTG	ATGTAGAACC	AGTGCATAAC	TTTTTATGGG	GTTTTGTTAT	120
TGGTTTTTTT	TTGTAAAGTG	TGAATAAAAG	GTATGTTTAC	TCATTTTTCC	TGAACACTGT	180
GTTGGTAATG	TGCATCATGA	CAATTTCCAG	TGAAGGTGAG	CTGGAGCTGG	TTGGACTAAT	240
GAGACTGAGG	AAGCAGCTTT	TCCTACGATC	TGCATTATGT	AATCACAGGT	CCAGAGAGCT	300
TTATGGAAGC	GGGAGAGGAG	GAGCACTTAC	TCATGTTGTA	TTTGTTAATG	GAGGATGTCA	360
TCTTTTCATA	GATGCTGGAA	CTAGAGTGCA	CTTGTTAGAT	GCTAAAGGTT	TGAGCTTTAC	420
ACAAAATGTC	TTCATCTGTA	TTTGTTATTG	TCTACAATAT	ATTTGAATTT	GGGGCAAGTC	480
TCGAG						485

## (2) INFORMATION FOR SEQ ID NO:853:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 746 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT AGGTGGCTGC ACCATCGGGA TGTCTGATC CAACATCGAG      60
GTCGTAAACC CTATTGTTGA TATGGACTCT AGAATAGGAT TCGCTGTGA TCCCTAGGGT      120
AACTTGTTCC GTTGGTCAAG TTATTGGATC AATTGAGTAT AGTAGTTCGC TTTGACTGGT      180
GAAGTCTTAG CATGTACTGC TCGGAGGTTG GGTTCGTCTC CGAGGTCGCC CCAACCGAAA      240
TTTTTAATGC AGGTTTGTA GTTTAGGACC TGTGGGTTTG TTAGGTAAGT TTTGCATTAA      300
TAAATTAAAG CTCATAGGG TCTTCTCGTC TTGCTGTGTT ATGCCCCGCC TCTTCACGGG      360
CAGGTCTAGA ATTCAAAAGC AAGCATCTCC GCATCGCATC CTCTTCATT AACCAGTGGC      420
CGGTTGCCAC TCTCTCCCC TCCCTCAGAG ACACCAAAC GCCAAAAACA AGACGCGTAG      480
CAGCACACAC TTCACAAAGC CAAGCCTAGG CCGCCCTGAG CATCCTGGTT CAAACGGGTG      540
CCTGGTCAGA AGGCCAGCCG CCCACTTCCC GTTTCCTCTT TAACTGAGGA GAAGCTGATC      600
CAGTTTCCGG AAACAAAATC CTTTCTCAT TTGGGGAGGG GGGTAATAGT GACATGCAGG      660
CACCTCTTTT AAACAGGCAA AACAGGAAGG GGGAAAAGGT GGGATTCATG TCGAGGCTAG      720
AGGCATTGGG AACACAAAT CTCGAG      746

```

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GCAATCTAG TGGTAAGGTG TTAATAATTT CACTCTTTT ATGTAGACGA GAGGTTGAGC      60
CTTGAAGGAT GAGAGGTGTT TACCGTCTTA GGATGGGGTA TAGTAGATAG AACCATATGA      120
ACCGAAGAGC TGAGGAATGT GAGCATGTAA CACCTGACGT GTACAGTAGT AGGTATGAAG      180
TCATATGGGA GCAGTATTTT TTTTCTATT TTGTTCACTG ATTTTCTCC ACTGGTACTT      240
AATAGGCACT CAATAAATAT TTTGCTAAT AAATGAAC TGATGTGA AATCCAGTTA      300
GTTTACATTT TGGTTGGTTT TGGTATTGTC TTTTAAAGGT AGCAAAGACC AAGTAATTAA      360
ATTTGTTAGA TGAATATGAG ATAAAATGGG CTCTCGAG      398

```

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GCCCTTGCT CCATTCCAA GGAAGAAAT TAAACCAAGA TGGTGGCTGG GATTACAGGC      60
ATGAGCCACT GTGACCAGCT CGCAAGATAG AATTTGAAA AATGTATCTT GAGCCTCTCT      120
TTCTCTTCT AGTTCTTTAA GATTCAAGAA ATCAAATAAG GTGATAGCCC TGAAGCCCTT      180
ACAGGCAGAG GTGCCCTCGA CTGTGGGTGA GGAGGTATTC ATCCCCAACC AGTGAGATAT      240
TCTGAGTGGG GAGAAGTGTT TTCTATCGAT GACACAGGGT GGGCCCTATG GGAGCAGCAG      300
CATGGCCCCA CCTTCGACCC AATGCTGAGA GGAAAGGGGC CTCAGGAAGG GGAGACTGAA      360
GCCAGCACAC TCGAG      375

```

(2) INFORMATION FOR SEQ ID NO:856:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

GAATTCGGCC TCATGGCCTA TGAATTTATT TTATTTTACT TATTTATTTA TTTGGTAGAG	60
ACAGGGTCTC ACTATATTAC CCAGGCTGGT CTCTTACCCC TGGCCTCAAG TGATCCTCCT	120
GTCTCTGCAT CCCAGGCCTC CCAAAGTGGT GGGATTACAG GCATGAGCCA CGATGCCTGT	180
CAGCCTTATT GCACTTCACA CACACACACA CACACACACA CACACACACA CACACACACA	240
CACACACTGA TTCAGGCCTT GAGAGTCAAG CCCAAGAGCT CCCTTGCCCC TGTTCCCCAC	300
TCTCTCGAG	309

## (2) INFORMATION FOR SEQ ID NO:857:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

GGAGAAATAT GGCTTCAGTT TTTCATTACT TCCTGTAGT TCTGGTCTTT CTGGATACAC	60
ACGCAGCTCA GCCTTCTGT CTGCCAGGAT GCACTTGCTC AGAGGGAGTT TTNGCAGGAC	120
TCTGCAGTGC ACATCTGTCT CCTTGGGAAA GATCCCTGGG AACCTTTCTG AAGAGTTCAA	180
GCAAGTGAGA ATTNAAAAAT TCNACCNTTA TTTGAGATGC CCCAAGGNTC TTTTCATCAAC	240
ATGAGCACCT TGGAAATACCT CTGGCTCAAT TTTAACAATA TCAGTGTGAT CCACCTAGGA	300
GCCCTGGAAC ACCTGCCAGA ACTGAGGGAG CTGAGACTGG AGGGGAACAA GCTCTGTCTCA	360
GTACCATGGA CAGCGTTCCG TGCCACCCCT CTCCTGAGGG TCTTGGATCT CAAACGCAAC	420
AAGATTGATG CACTCCCTGA GCTGGCTCTT CAATTCTTGG TCAGCCTGAC CTACCTTGAC	480
CTATCCTCCA ATAGGCTTAC AGTTGTATCC AAGAGTGTCT TCCTGAACTG GCCAGCCTAC	540
CAGAAATGCC GGCAGCCACT CGAG	564

## (2) INFORMATION FOR SEQ ID NO:858:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

GAATTCGGCC TTCATGGCCT AGGTGGTTTG GAGTCATAAC ACAGAAGTGG TGAGAAGTGA	60
TCAGAGGCGG ATTTCTCTGGT GCATTGAATA TGGGATGTGA GATAAGCAGA GGAGTCAGGA	120
TGGCTTCCCG GACTATGGTC CAAACAGTGG AAAGGATGCA GTGGCTGTAA CCTGAAGCAG	180
GAAGTCTGCA GGTGGGACAG AAATGTTTGT TAAGGGAAGT GTTTTCAGAG TTTGGTTTTG	240
GATATGTTAA GTTTGCCAGT GTAAATGGAC ATACTGTGTA GACATTTGGA AATATGAATC	300
TTGGAAATAT GAGGTTCTGG GTATGAGCAG AGTCCAAGGA TGAGCCTAGG GATTGGAGAG	360
CTGAAACCAG AAAAAGAAGC TAGAAGGAGA GGCCAGTTAA GACAGTGAAA AGAAGCGAGG	420

CATGAGGAA	ACTTGAGGCC	AGTAGCTCAA	CAGCCTGGGC	ATCTAGCGA	GACCCGTGTCT	480
CAGCAACAAC	AACAAAACGG	ACAGTGAAGA	GAGTATTTGA	AGGAGAGGGG	AACAGGCAGC	540
GTATTGCTTA	TTGCTGAGGG	GCAAAGTGAA	GACCAAGGAT	AGACTGCTGG	GCTTGACAGC	600
ATGGAGGGTG	CTGGGGGCCT	AGGCAAGTGC	AATATTCATG	TGGTGTCAAT	GGGCCAAAGG	660
TGTCATTGGA	GGTACTCGAG					680

## (2) INFORMATION FOR SEQ ID NO:859:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

GCAAAAGCAA	GTCACGTGGT	CATGCAGGGC	CTCAGTAAGC	AAGAAATATT	TACCCGCCCG	60
GGGATGGACA	GGTAGGAAAG	GGTCTGTAA	GGAAGGGCAG	CAAATATTTG	GATAACAGTA	120
CTATGTGTTT	GTATGGAGCG	ATATTTAAGA	AGGTTTCCTA	GGTTTTTGA	GGGGTATTGA	180
AGCTGAGAGG	TTGGGGGCAG	GCAGGAAGCT	CTGCAGCCTG	TAGCCTATGG	TATCAAGCTT	240
CATGAGAACG	AGAATTAAC	AGTTACATCT	TTATTACCAT	TTTTGGCATC	TCTGCAGACA	300
GTGGATCTAA	TGCATGATAG	CTGATTAATA	AATGTTTGTT	GAATTAATGA	ACAAAATAGC	360
AAGAAACACG	TGTTCTCGAG					380

## (2) INFORMATION FOR SEQ ID NO:860:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

GATTTTGAAT	ACACNACNAA	GTTAGAAGAA	TCTTATTACT	TAGATTCCAT	TAATATCTTA	60
CTATGTTTTA	TTACAAATCT	ATGTATCTCT	CTAGCCATCC	TTTAATCCAT	GTTATGTTTT	120
TGATGCTTTG	CAAAGTAACT	TGCGAATATT	GGTTCATTTT	CCCTGAAATA	CTTAAGCATG	180
CAAATCATGA	ACCAAGTTCC	AATATTTGTG	TGAAATGCAC	AAATAAGTGT	AAATTTGCAG	240
AGTTTGGGCA	TATGCGTATA	CCTATCAAGA	CACGGAGCAT	TAATATCACC	CTGGAAGTCC	300
TCGAG						305

## (2) INFORMATION FOR SEQ ID NO:861:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

GAATTCGGCC	TTTATGGCCT	AGTGAACAAG	TAAAGACTGA	ATGGGGCTGA	GATGAAGGCA	60
ATGTTTCCAA	GGAAAGGAAA	TGTTATGAGC	AAGAGTGTGA	GGCAAGAGAA	GCTGGAACCA	120

CATTCAGAGA	GTATCCTGTA	GATTGCTCCA	CCTAGAATCT	CAGGTGGGTG	GAGCAGTGGT	180
GGGAGAAGAC	TGGAAAGGTA	AGTTGAAGGT	AAGGAATGTG	TGGTGGGCCT	CAGATCCCAG	240
GCTCATTCCT	CAAATCACTT	CTTACTTCCC	TCATTATCT	TTGTTTAAAT	AAGGTTAGCA	300
CACTCACTCG	AG					312

## (2) INFORMATION FOR SEQ ID NO:862:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

GAATTCGGCC	TTCATGGCCT	AGTGGCGGGC	ATCTTGTTGTT	TATCTTCTGG	AGTGAAATAT	60
GCTTTTCCAG	TTGTCTTCGA	AGTTTCACCT	CTGCTCCATA	TTTTCCAGTG	GTCCCGTTGT	120
CAGCCAGAAAT	GAAGTGGGAA	TGCATGCTGT	TGAGAACAGT	GAGCTTGCTC	ATGGGATTGG	180
ACATGGTCTG	GTATGGCCGG	ACAACATCTC	TTCCAATGAG	GTCCTCCTGG	TTTTCCACAA	240
TTCCCCAGGG	GGCAATACCT	ATGGTGCATA	TCTTCTCTCG	AG		282

## (2) INFORMATION FOR SEQ ID NO:863:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 388 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

GAAATTCGGC	CAAAGAGGCC	TAGGGTGCCT	GTGGTTCCGG	CTACTCGGGA	GTCTGAGGCA	60
GCACAATTGC	TTGAACCTGG	GAGGTGGAGG	TTGCGGTGAG	CCAANATGGT	GCCACTGCAC	120
TCCAGCCTGG	GTGACAGAGT	GAGACTCTGT	CTCAAAAAAA	AAAAGACCTT	CCTTAATAAG	180
TGGAGTTGGA	TAGACATTTT	GCTTTGGAAA	ACAGAAGCTA	TTTACTGTCA	ATATTAGGTC	240
TACTTCATTG	ATTTACACAG	ATAGGCAAAG	ATGTCTGGGG	CTTTGCTCAC	TAGGGAATTC	300
TGGCCATGGC	CTTTTGCTTC	TCTTCTAACC	AGGCCTTTTG	CTTCTCTTCT	CCCTTTTTCG	360
CAGATGTAGA	ACCACCAGGC	GACTCGAG				388

## (2) INFORMATION FOR SEQ ID NO:864:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 115 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GAATTCGGCC	AAAGAGGCCT	AAAGTTTCTA	AAGATTGTAA	ATTTAAAAGG	AAATGCCAAA	60
TGAATTATTT	GTAAAATTGT	TTAAAAAAT	TAATAAATAA	TGAGTGCGCC	TCGAG	115

## (2) INFORMATION FOR SEQ ID NO:865:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AGATTGAGAA TGCTGACTCG CCTAAAAGCT TTATGCTTAT      60
CATGTCTGTG GTGCTTGAG CCTGTGGCCC AGGTGATTG GGGTTTGGG ACGCCTCATG      120
GGCAGAGACG GCTCGAG                                         137

```

## (2) INFORMATION FOR SEQ ID NO:866:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 622 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC AAAGTAGGCC TAAATCCGT CCGNAACTA TGAACAATGG CAGCTACAGC      60
GTANTCAGCT TCAAGGAGCA ATGCAGCAGT TTAACCAGAG ATTCATTTAT GGGGAATCAA      120
GATTTATTG CTACATCACA AAGTAAAGAA TTTGATCCTC TTGGTCCATT GCCACCTGGA      180
TGGGTCAATT AAATGAAAAG CCCTTACCTG AAGGTTGGNT TTNAGATTC ACAGTGGATG      240
GAATTCATA TTTGTGGAC CACAATAGAA GAACTACCAC CTATATNGAT CCCCACACAG      300
GAAAATCTGC CCTGTAAGTT TTCTAAACAT TGTAAGATTAA GAGTAAAATA CTAGTCCTTC      360
AGATTTTAT ATAAAGATTT GTATTAGCAA GGAGTGAAG TCTTAGTATT TCTTGAGTTA      420
GCTTGACAAAT AGGTTTCTGT TCATTAAGTA TTTTGCATT CCATCTCCCT CTTGGATATT      480
TTATCCTAGA GATTTTCATA TTTGTTACCA TTTGTTTACA CAGCACTAAA TGAACTATT      540
TAGAATTTAT AGGTATTGTA CTGCTTACCA ATTAGTCTCT GATTCTTGAT TTTGAGCTTC      600
TTTCATTCCC TNAACACTCG AG                                         622

```

## (2) INFORMATION FOR SEQ ID NO:867:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCT GGCAGGCGTG TTTATTGACT CTTCCAATTA ATTTTAAAGA      60
ACCTGAAGAA ATGGACAAAG ACAGAGAAAA GNCNACCAGA TGTGATTCCG CCCTTCCAGN      120
AAGCAAAGAG CTTATTTCAT CCCATATGAT CGATGCCAGT CATGGGGANG AGTGGCTGTG      180
TGGAATTAAT GGATTTTCAA CATCCATCAC AGAGGACACA CATGTATATT AGCNAGTCTN      240
AAACCTCTTA AATAAACTGC ATTGCTTTTC ATTTTCACCT CCAGTTATAA AACCAGTGGA      300
TGATGNAAAG GCCATGTGAC NATACAGCAT GTACTCTCAG GNATGTTGT GTGACAGGGA      360
TATTATATCT GAAGGGACAG GGCAACTGGG AGGGTGAAGT GCTCATAACT CTCAATTGTC      420
CAGGTAATGA AGCATTGGGA AAGCGACCTC GAG                                         453

```

## (2) INFORMATION FOR SEQ ID NO:868:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 642 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC AAAGAGGCCT ACGAGCACCT CCGCCGCGCG CCTCCTCCGC CGCCGCGGAC      60
TCCGGCAGCT TTATCGCCAG AGTCCCTGAN CTCTCGCTTT CTTTTTAATC CCCTGCATCG      120
GATCACCGGC GTGCCCCACC ATGTCAGACG CAGCCGTAGA CACCAGCTCC GAANTCACCA      180
CCAAGGACTT AAAGGAGAAG AAGGAAGTNG TGGAAGAGGC AGAAAATGGA AGAGACGCCC      240
TGCTANCGGG AATGCTAATG AGGAAANTGG GGAGCAGGAG GCTGACAATG AGGTAGACGA      300
AGAAGAGGAA GAAGGTGGGG AGGAAGAGGA GGAGGAAGAA GAAGGTGATG GTGAGGAAGA      360
GGATGGAGAT GAAGATGAGG AGCTGAGTCA GCTACGGGCA AGCGGNCAGC TGAAGATGAT      420
GAGGATGATG ATGTCGATAC CANGAGCAGA AGACCGACGA GGATGACTAG ACNGCCAAAA      480
AGGGAAAGTT AACTNAAAAA AAAAAGGCCG CCGTGACCTA TTCACCTCCA CTTCCCCTCT      540
CAGAATCTAA ACGTGGTCAC CTTGAGTAG AGAGGCCCGC CCGCCCACCG TGGGCAGTGC      600
CACCCGAGA TGACACGCGC TCTCCACCAC CCAACTCTCG AG                                642

```

## (2) INFORMATION FOR SEQ ID NO:869:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

```

GAATTCGGCC AAAGAGGCCT ACTCCTCCTC TTCGGTCTCA CCACAACCCA CCCTATCAAA      60
ATACTGCACC TCCACACAGC CGTTTCTCTT TCATTGGGAA AGGCCAGCAC CTGGCCTCTT      120
TCTCTTTGAT GCTTTTGTA ATTGAGTTT GGGGAGAGCG TTCCTGGTCT TTGTCTTAAA      180
CCAGTGAAGA CAAACAGTGT ACTTGGTGTA AGCAGACACT GAAGGTTTGT CTAAGCTGTC      240
AGCCTGCTCT CCCAACACCT GTGCCTGTGC TGAGACCTGA TGGTCCAGGA AAGGGCAGCT      300
GCCACACTGT GGATCCCCCG CCACCCACAC ACGCACCCCC CCTCGAG                                347

```

## (2) INFORMATION FOR SEQ ID NO:870:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

```

GAATTCGGCC AAAGAGGCCT ACAGAGAAGC GGGGCGAACT GAGGCGAGTG AAGTGGACTC      60
TGAGGGCTAC CGCTACCGCC ACTGCTGCGG CAGGGGCGTG GAGGGCAGAG GGCCGCGGAG      120
GCCGCAAGTG CAAACATGGC TCAGAGCAGA GACGGCGGAA ACCCGTTGCG CGAGCCCAGC      180
GAGCTTGACA ACCCCTTCA GGACCCAGCT GTGATCCAGC ACCGACCCAG CCGGCAGTAT      240

```

GCCACGCTACGTCTACAA CCCTTTTGAG ACCCGGGAGC CACACCAGC CTATGAGCCT 300  
CCAGCCCCCTG CCCCATTTGCC TCCACCCTCA GTCCTCTCCT TGCAGCCCTC GAG 353

## (2) INFORMATION FOR SEQ ID NO:871:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 426 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCTTAG TTGTTTTCA ACTGGAAAAT ATATAGAGAA AGATGAAGGG GCATTTTTC 60  
 CTCTACTCAT CAATTTTGG TACCAAATTT CTTAAAAACC AGATGGTTTA AAGAAAATTT 120  
 TTCCAAAAAT TATGTTAACA TTCTGCTCAG ACATGGCTGC TAAAAAATA GCATATACAC 180  
 ATATAATACT GAACAGCTTC TGCAGTGCCT GTAAACTCTC AGCTCATTTT CTCTTTCTAA 240  
 ANAAAAATA TATTATAACT GATCCAGAA CTCAATCTCT ATTGTGCAGC AGTATCAAAG 300  
 GTCCTTAAAT TCTCAACAAT GAAGGAAAAA CAAAAACCCA TTCCCCGAC CGCTTGAGCA 360  
 GGACTAGGGA AGGAGGAGTC CGTGGATGCA AAGGTTCTGCT GCCCCGACGC CCTCAGANTC 420  
 CTCGAG 426

## (2) INFORMATION FOR SEQ ID NO:872:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCC AAAGAGGCCT AGGGAGGGCT GAGAGGGAGG GAGGGAGGAA GGAAGGAAAA 60  
 AAGGAACAAA TGCCGCCTGA CCGTTCCTTG TGGAACTACT ACACCTATGA TGAGTACCTC 120  
 CATGGACCAT GCACCTGCCT TGAAACAAGG AGGCACAGCA CACAGGGCCC TCAGCTAGAG 180  
 TGACAGGGAA AGCGGGGTGG ACATGGGGAA GGCTCAAACCT CAAGCTTTGA AATCGGGGAA 240  
 AGCCCCGAAA TCTGAACCAC TCTTGGGGCC ATCCTTCTCT CTCCACATT CACACCTTCG 300  
 CCTGCGCTCC CATAATTGCA AATTAATTCA TCCACACATT CACACATTCT CTCCCTCCA 360  
 CTCTCAANAG GCAGCCCCAA GCCCGGGGGC CTCACGAAGT CTGGGTGGAT GACCAAGCTC 420  
 CTCCCTCGAG 430

## (2) INFORMATION FOR SEQ ID NO:873:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 606 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC AAAGAGGCCT ACGGGCATGG TGGTAGCTCA GGAGTTCAAG GCTACAGTA 60  
 ACTATGATTG TGCCACTGCA CCCAGCTTG GGTGACAGAC AGTGAGACCC TGTCTCTAAG 120



```

AAATAAATAA TAAAAA TAAGAGGAGC TTTTGAATT CAGCTAAG GAAGTTACTG 180
GTGCCCATGG AGGGAAGTGT TCCAGGCAAG TGGTGGTGT AAAGGTNGAG AGAAGAGACA 240
TTAGCTCAGT GCTTCCCAA TAGGATANCC AAGGCGCCAA GCTGCANACT GATCTCAGGT 300
GTGGCCANT GCCTCCCCT CAGCTGGAAC CCCAGACCAG ACTCCTGCAG TTCAAGCAG 360
CCTCCTCCTT CTATCCCGGT GTACCTTCCA TATCTCAGTT CCACCACGGG GAACCTCAAA 420
CACTCGACAA CCCATTTCAA AAGCCTGGCT ATGGAAAGAA GAGGAAAGGG AGGAGCCGCA 480
AGTTTGGGAG AAAGTGTATT TGGGATGCTG GAGTGGGAGC CTGTTTGTAG GAGCCATAGG 540
GCAGGCTTGA AGATGAATGG GAAAGAAGAT GAGNGGAAGA GGAGGTGAGA CTGAGAGCAT 600
CTCGAG 606

```

## (2) INFORMATION FOR SEQ ID NO:874:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

```

GAATTCGGCC TTCATGGCCT ACTGGGGGTG AACTATAAA GAAAAGCAAG AAGTGATTAT 60
CATAAAGAA AGGTAATGAT GTTTTTCCTC TTTCTCGAG 99

```

## (2) INFORMATION FOR SEQ ID NO:875:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

```

GATGAACAGA TACGATTGTG GGATTTTAT CATCTGTGTA GCAGGTGGTG TATGCATCGG 60
GGTACTCCTC GAG 73

```

## (2) INFORMATION FOR SEQ ID NO:876:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

```

GAATTCGGCC TTCATGGCCT ACCAGAAGAT GCCTGCCTTC AATAGATTGT TTCCCTGGC 60
TTCTCTCGTG CTTATCTACT GGGTCAGTGT CTGCTTCCCT GTGTGTGTGG AAGTGCCCTC 120
GGAGACGGAG CCGTGCANGG CAACCCCATG AAGCTGCGCT GCATCTCCTG CATGAAGAGA 180
GAGGAGGTGG AGGCCACCAC GGTGGTGGAA TGGTTCTACA GGCCCGAGGG CGGTAAAGAT 240
TTCCTTATTT ACGAGTATCG GAATGGCCAC CAGGAGGTGG AGAGCCCCTT TCAGGGGCGC 300
CTGCAGTGGG ATGGCAGCAA GGACCTGCAG GACGTGTCCA TCACTGTGCT CAACGTCACT 360
CTGAACGACT CTGGCCTCTA CACCTGCAAT GTGTCCCGGG AGTTTGAGTT TGAGGCGCAT 420

```

CGGCCCTTGAAGACGAC GCGGCTGATC CCCCTAAGAG TCGGACTCGA G

471

## (2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```

GAATTCGGCC TTCATGGCCT ACGGAAAAAT AGTTATATTC CAGTCTAAGC CAGAAATCCA      60
GTACGCACCA CATTGGAGC AGGAGCCTAC AAATTTGAGA GAATCATCTC TAAGCAAAAT      120
GTCCTATCTG CAAATGAGAA ATTCACAAGC GCACAGGAAT TTTCTTGAAG ATGGAGAAAG      180
TGATGGCTTT TTAAGATGCC TCTCTCTTAA CTCTGGGTGG ATTTTAACTA CAACTCTTGT      240
CCTCTCGGTG ATGGTATTGC TTTGGATTG TGTGCAACT GTTGCTACAG CTGTGGAGCA      300
GTATGTTCCC TCTGAGAAAG TGAGTATCTA TGGTGACTTG GAGTTTATGA ATGAACAAAA      360
GCTAAACAGA TATCCAGCTT CTTCTCTTGT GGTGTTTGA TCTAAACTG AAGATCATGA      420
AGAAGCAGGG CCTCTACCTA CAAAAGTGAA TCTCGAG                                457

```

## (2) INFORMATION FOR SEQ ID NO:878:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

```

GAATTCGGCC TTCANGGCCT AATAACATCT CCCCAGACCC AGAAAAACAG AAAGCTCCAC      60
AGAAATTAAA TGTGAAGAG AAACTCTCAA AGGAAGTTAC AGAAGAAAAC TATCTCTTTC      120
CCAGTAAGTT CAGTGGAAG TGCACTAGAA CATGAATATG ACTNGGTGAA TTAGATGAAA      180
GTTTTTATGG ACCAGAAAAG GCCACAACAT ATTATCTCAT CCAGAGACCC AAAGCCAAAA      240
CTCAGCTGAC AGGAATGTTT CAAAGGACAC AAAGAGAGAT GTGGACTCAA AGTCACCGGG      300
GATGCCTTTA TTTGAAGCAG AGGAAGGAGT TCTATCACGA ACCCAGATAT TTCCTACCAC      360
TATTAAAGTC ATTGATCCAG AATTTCTGGA GGAGCCACCT GCACTTGCA TTTTATATAA      420
GGATCTGTAT GAAGAAGCAG TTGGAGAGAA AAAGAAGGAA GAGGAGACAG CTTCTGAAGG      480
TGACAGTGTG AATTCTGAGG CATCATTTCC CAGCAGAAAT TCTGACTG ATGATGGAAC      540
AGGAATGCTC GAG                                553

```

## (2) INFORMATION FOR SEQ ID NO:879:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 176 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

```

GAATTCGGCC TTCATGGCCT AGGTTCTTAG GCTCTGAGAT ACTTCCTGCT TCCCTCACAA      60

```

ACATGCTTAT GTTGGTGTG CATGCACATT TGCCTATCAG CACATATAAA GAGACAGTGG 120  
 AAAAGTCAGA AGTGTTTTCA GGTATTTC CGATTGAATT CTAGACCTGC CTCGAG 176

## (2) INFORMATION FOR SEQ ID NO:880:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

GAATTCGGNC TTCATGGCCT ACTTCCTCTT CCTCCTCTTC CTCTTCCCCT TCCTGGTGCA 60  
 GGTACATGAC ATTCCGCACG TTCCGGACGG CCCGGGCAGT CGGAGACAGG ATCACTGTGT 120  
 CACAACTGTC ATCACTGTCC CCCTCACTGT CCAAAATGTA GTCCCGGGGA ACATGATTCC 180  
 ACAGCCCATG ATGTCCCCTT TGTAACAGCG TGGCCCAAAG GGTCCCCAC ACCACCTTCC 240  
 TGCCCTCATG CTCGGCTCT ATCTCTTCCC CATCCTCTTC CTCTTCTCTT TCCTCCTCTT 300  
 CCTCTTCCCC TCACTCGAG 320

## (2) INFORMATION FOR SEQ ID NO:881:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 324 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

GAATTCGGCC TTCATGGCCT AATCTGTAAC ATGAGGGAAT AAACCTAGTAT TATCTAAGCA 60  
 TTCTCTAGAC TTAAATATG ATTCTAGAC CACTGAGGAG ATTAAAAATG AGGTGAGAGG 120  
 GATTTCAAAA TGAAGCGACC TGCCAGACAT GGTGGCTCAC AGCTGTCATC CCAACATTTT 180  
 GAGAGACTGA GGCAGGGGGA TCGATTGAGC CCAGGAGTTC AAGACCAGCC TGGACAACAT 240  
 CGCAAGACCC TGTCTTACA AAATAAAAAA AATGTAAAAA TAGCTAGGTG TGGTGGCACA 300  
 CACCTATAGT CCCAGCTACT CGAG 324

## (2) INFORMATION FOR SEQ ID NO:882:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 293 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

GAATTCGGCC TTCATGGCCT ACAGAAATTG AGAGTAAACA GAAACATTTA TAGGTCAATT 60  
 GCTATTGATT ACGAACGTCT AAGTGCATTT CAGTGTTTTA TATTTTACAA ATGTGTTGGA 120  
 ATTTTACTTT ACTTATTCTT TTGAGACAGG TTCTCGCACT CCAGCCTAGG CAACAGAGTG 180  
 AGACTCCGTC CCAATCAGTC AATCAATCAA TCAATCAATA CCACAGCGGA GAAATCTTT 240  
 ACAACTTTTG GTTAGGTAAT GATTCTTAG GTAGGACACA CAAACACTC GAG 293

## (2) INFORMATION FOR SEQ ID NO:883:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGGC CTTATGGGCC TACCTACGGA GTGCTTCTTT CTCACCCTGC ATGCTCACCA      60
CCTCTCTATT CTGCCTAGTT GCCGTCGCTA TATCCGCAGA CTCGGGGCTA TCCGGGAGCT      120
CAATAGGTAT GTGCCATGAT ACCGTGTCCT GGGATTGCCT GAGTTACCAC TTTTCTCAG      180
GGGCAGGCAA TTCCATTGTG AACAGTAGTT TTGAATGTTG GGGGAGGTAT GTACGTTATA      240
TAGTGTTTCT GTCTGCCTCC ACCGCCACAT CCATGTTGCT CAGTTGTCCA GAGTTCTTTA      300
CCTGGTGAAG TGATCCAAAC CTTGATTCTT GAGAGTTCTG AACCCCTCGA G      351

```

## (2) INFORMATION FOR SEQ ID NO:884:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC TTCATGGCCT ACCTGGTGTT TTTTGTITTT GTTTTACCC CTGTCTTAT      60
GCCAGTGAGT TCCTTCGGGG TTAATCCTGC AGTAGGTGGA CTATCATCTG GGACAGTTGG      120
GGAAGCTTCG ACAGCCCTGA GTTCAGCAGC CCAGGTAGCT TTGCAGTCTC TCTCTCATGC      180
AATGGCTTCA GCCGAGCAAC AGCTACAGGT GCTGCAAGAG AAACAGCAGC AGCTTTTGAA      240
GCTTCAGCAA CAGAAAGCAA AGCTGGAAGC CAAGTTACAT CAGACAACAG CTGCAGCAGC      300
TGCAGCAGCA TCAGCAGTAG GTCTGTTCCT CAACTCTGTG CCTTCCAACC CAGTGGCTGC      360
CCCTGGATTG TTCATTATC CATCTGATGT TATCCACCC ACTCCAAAAA CAACACCTCT      420
TTTATGACT CCACCACTCA CCCAGCCCT CGAG      454

```

## (2) INFORMATION FOR SEQ ID NO:885:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC TTCATGGCCT AGACGAATTT CAAGTATTTA TTACCTCTGT TGAATATAAT      60
TTATTGAACT GTAAGCTTAT ATATAATTCA ACTTTAAAAA ATGGCCTGAG TTGAACRAAC      120
AGCTCACAC AATTCTATAA TCTAGGAGTT GGCTCTCGTG GGTCCGCACA GGTGAGCTAG      180
GGTGCCTGGT CCTGGTGGAG GGCAGGAGGC CCCCTTCCCC TGGCCTCCCT AGCCAGTCCC      240
CACACACAGC CCCAGTGGCC TCCACAGCTC CACCCTCCTT TCATGGCCGT TCITTTTCTT      300
AGATGCCAAA AGCAGAAAGC TCGAG      325

```

## (2) INFORMATION FOR SEQ ID NO:886:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

```
GAATTCGGCC TTCATGGCCT AGGGAGAATT ATTTGATATT TGTGATACT TGACAGCAGA      60
TAATTTTTTA ACTGCAAGAC CACTAGAGGT CACCAGCGTA AAAC TTCAA CTTTGATTCT      120
GCTGGTAGTG AACTGAAAAG TTCAACTACT ATTCTGCAAT GTTTCCTTTG TTTCTTTTTT      180
TTTTTTTTTT TTGTTTGTAG ATGGAGTGTT GCTCTGTCAC CCAGGCTCGA G                231
```

## (2) INFORMATION FOR SEQ ID NO:887:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```
GAATTCGGCC TTCATGGCCT AGTTGCAGAA GAAAAAAAAG AAAATCCATC CCTGCCACTC      60
ACAAGCTGCT ACCTACAGCA GATTACTATC CTAAGCCTCA ATTTTGCCAT CTGAAAAAAA      120
CAGAAAAAAC AGTTAATAAT ACCTCACCAG GTTCTTGCTA ATTCTTTAGT AACACAGAGG      180
AATCTTTTAG CCCTTCTTTT TTTGTCTTAT AGCTTAAACC ATGCTGCAGG AAATGTATCA      240
ATCCAAGATA AAAGAGCTGA AATCCAAGAA CCTCCCCCTC ACATTTTGTG TGTGTTTGTG      300
TTTTGTTTGT TTTGTTTAG ACACAGGATC TTGCTCTGTC ACCCAGGCTC TCGAG          355
```

## (2) INFORMATION FOR SEQ ID NO:888:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```
GAATTCGGCC TTCATGGCCT AGCCACCACG CCCAGCCTCA ATTGCATTTC TACACACAAG      60
GAATAATCCA AAAAGGAAAT TAAGGAAACA ATTCATTTA CAGTAGCATC AATATGAATA      120
AAATATTTAG AAATAAACTT AACCAGTGAT GTACAGTGAC AGTATGTACA CTGAAAGCTA      180
CAAAACATCA CTAACATAAA TGAAGACAAA TTAGACATCC TGTGTTAATA CATGGGAAGG      240
CTCTTAAGCT GTCAATACTA AAGGTGATCT ACAAATTCAG TGCAATCCCT GTCAAAATCC      300
CAATGATGTT TTTTGAAGAA ATAGAAAAAC TCATCTGGGA ATTCATACGG AATCTCGAG      359
```

## (2) INFORMATION FOR SEQ ID NO:889:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 203 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GAATTCGGCC TTCATGGCCT ACTAAATTGG AATAAAAGTT TTAATAATAC TAACTTGTCT	60
TTTTTTTTTT TCTAAAATTG ATTCCATTGC TACTGTTAAT AGTATAAATC TTTAAAGGGT	120
GAATTTTTTG GATGAAATTA ATGCTTATTC TTTTCTTTT AACAGGGCA ATAAATGTGT	180
TCGTAAGTGC CAACCACTC GAG	203

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 376 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGTTGATTGG	60
TTTTCTTAGG TCAGCAATGA GTCTTAAAGA TAAATTTCT ACTGTGTAAT CTTTAGTGTT	120
TTCTTTTTTT TTTCAACTAT CTTTTAATCA GTTTCAAACA TTTCAAGTAT TAAAAGAGAG	180
ATTTGTTGTG GTTTTGTGTG GGAGCAGAAA TGGATTTCAG GGAGTTTACC TTCAGAGCTT	240
TTGTTTTTGT TACGGTGGGT CTCTCTAGTG GAAAAAAAT TTCCCATCC CTTTGGAAAT	300
ATTTCTTTTA AAGGAAATCA TGTTTTTAAA ACAAAATTATC GAAATCAGCT TTCTAATCAA	360
TTTGAATCAT CTCGAG	376

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 335 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTCGGCC TTCATGGCCT ACGCTTGTC GTGGCTTCTC TGAGAAGAAA AGTTGAAAAA	60
GGGTAAAAGT TTTAGGAAT ATTCGGGCTC TCTATTGCTA AGCATAGCGA GTGTCGGTTT	120
TCTCTCTCCA ACAGACATCG CTATTGCGGT TCCGAGGCAG TGGGAAGAGA TGCGGCCCTT	180
GGACATCGTC GAGCTGGCGG AACCGGAGGA AGTGGAGGTG CTGGAGCCCG AGGAGGATTT	240
CGAGCAGTTT CTGCTCCCGG TCATCAACGA GATGCCGCGA GGACATCGCG TCGCTGACGC	300
GCGAGCACGG GCGGGCGTAC CCACGGACCC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 288 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC TTCATGGCCT ACTATCTTTA AAGTTAATGT CTAGCCAAGA GTTTAGTAAA	60
CGAAGAATTA AACTGCACTG TTGATCGGTG CTTTGTGTAA ATACATCTTT AACATTGGG	120
TGGAGAGGGG CCTTAAGAAG GACAGTTCAT TGTAGGAAAG CAATTCTGTA CATGAGTTTA	180
AGCATTCTTG TTGCATTGTC TCTGCAGATT CTATTTTGT TTACAATATT GAAATGTATG	240
TTAGCAAAAT GGGTGGATTT TCAAATAAAA TGCAGCTTCC CACTCGAG	288

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

GAATTCGGCC TTCATGGCCT ACTCATCGCT AGTCCATATT TGGCCTCCTT TTAAGCAGTT	60
AATTAACAGG TATTTTATA GCATAATGGG TTTCCTCAAA CCACCACCCA ACCAAAACCC	120
AGCCCTTGAT GATGACCTGC GCCCACCACG CAGGGCGCCC TTGATGCACA CGCACCTGCC	180
GCCCCCGCCC TGTGACCACC GCCCTGAGTG CCGGGCTCAT CATCCCTTCC ATGCCCTTTC	240
TACATTGCTA CTAAGAATCT GTGTGTATTC ATTAAGACCA TIACTTTTCT TTCAGATTTT	300
AAATTTATTA AAGGCTTTAG TGCTGAATGT GATTTTGAGG ACTCTTTTAA AAAAATACTT	360
TTGGTTGAA TGTGGACATT TCCCCTTAG CATTGTGTTG CTCATGTTCC TCCATATTGA	420
TGTGTGTTA GCTAGAGTAC CCCCCTCTAA CTCTGCGAAT ATGCCACACT GTGTGCACCT	480
GCATACACTC GAG	493

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGCC TTCATGGCCT AAAAAAGGA AATAGAATCC TATAATTTAC CATGAAAATA	60
TTATGAAAGA TACAGGTCAG CATGTATTGT AGGAGCAAAC TTAGTGGTCC TGCTGGTCTT	120
TTGGGTTTCAT TGGTTTGTGG TTAAGTTTCA AGTAAGTTCC CTCTTGGTCT GGTGTGTTCT	180
GCTGCTGGTG AGCTCCAGCA GCTCAAACCA GCTCTCTCCC ATTAGTAAGC CATGCTAAGT	240
TTAGTTTAAC ACCCATAGTA GGCCTAAAAG CAGCCACCAA TTAAGAAAGC GTTCAAGCTC	300
AACACCCACA TACTCGAG	318

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895;

GAATTCGGCC	TTCATGGCCT	ACATTGAGTC	AGTCACCAGG	TGTTTTTTTT	TGTTTTTGTT	60
TTATTTTGTT	TGTTTTCTGT	TTTGCACCTG	CAGTATCTCG	GCAGGTGAGA	CTGTCATGCC	120
GTGCAGGTGC	CAGCCCTCTC	TCTGCTGTTT	TTGCTCTTGT	TGCTCTCAGA	GCCAAGAGCC	180
ACTCTGCACC	CAGAGGGGCT	CCCATCCACA	CCAGCCTGCC	CTTTACTCAG	CTCTCACTTT	240
CGTCCATCAG	TGTGGGATCC	TGTCTGCAGA	ACCCCTCAA	AACTCTTTC	TTACGGGTGC	300
AGCTCCACCC	ATCCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

GAATTCGGCC	TTCATGGCCT	AAGACAGGGA	GGCAGACACA	TTGAGAAATA	ATACAAATTA	60
TTATCATCTT	CATAAATAAT	ATAGACAGCT	CTGACGATAA	AGGTGTGTAC	CAGATATGAC	120
AGGAGCAGAG	CTGAGGCATC	CAGCACCTTC	AGGGATGAGG	GGTAATGGTG	TTAGGAAAGG	180
TTTTCTGTAC	TTCTCTTACG	TGGGTGCTTT	TCTCCATCTC	TACTTTCAAA	TCCCACCCAT	240
GCTAAGGCCT	TATCCAAATG	ACCAC TGCCA	GAAAG			275

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

CTCAGATTCC	CCCATCAGTC	TATGTGCCCC	ATGAGAGCAG	GCACACATAG	GAACAGGTCA	60
GTCAGTTCTT	GATGCCCAGC	ACAAGGCCAG	GCACAGAGTG	GCAGGGGAGT	TGTGGGGCCC	120
CACAGACCAG	AGGCCAGCGC	CAATTCTGCC	CCTGCTATTT	GCATGCCCTC	ACCTCTGTGG	180
GCCCCGTGCT	GTCTGCGAGG	ATTCAGGGAG	TAAGTCTTGG	AGCACAGCGC	GGGTGGAGC	240
ATCAGAAAT	GCCAGGTGCT	ATCAGCACCA	TCATTCTTTC	CACTCCCTAC	TCCCTTTAGG	300
CCATGAAGGC	CGAATTC					317

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:



GAATTCGGCC TTCATGGCCT ATGACCTGGA AGAGTGGTGC GAAAGAGAGG AAGGGGCAGA	60
GGCCAGGAGT GTCATGCAAT TGCTGTGCCT CCTCACGGAA TTATTGAGTG TGTCCCCTGT	120
GTCATAGACC CATCACAGTT GTCTCTTCCA GTACTTCGTG AGCTCCCTAA GGGCAGGGAC	180
TGTGTATACT TCTGGGCGCT AAAATGAGTG TGAATCCATG TCAGGCACTC TGTGCCAGTC	240
TTTATTGGAA ATATATGATT TTATCTTAAA TAGTTCTTCA ATGTAGGTAC TATCACTTGC	300
CCTGACTTTA GAGATACAGG CACTAAGGTT TGTGGAGTA AATAACTTTC CCAAGATCCT	360
CGAG	364

## (2) INFORMATION FOR SEQ ID NO:899:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

GAATTCGGCC TTCATGGCCT AGGTGTTTAT GGATATCCTC CAGATTATTA TGGATATGAA	60
GATTATTATG ATTATTATGG TTATGATTAC CATAACTATC GTGGTGGATA TGAAGATCCA	120
TACTATGGTT ATGAAGATTT TCAAGTTGGA GCTAGAGGAA GGGGTGGTAG AGGAGCAAGG	180
GGTGCTGCTC CATCCAGAGG TCGTGGGGCT GCTCCTCCCC GCGGTAGAGC CGGTTATTCA	240
CAGAGAGGAG GTCCTGGATC AGCAAGAGGC GTTCGAGGTG CGAGAGGAGG TGTCCAACAA	300
ACTCGAG	307

## (2) INFORMATION FOR SEQ ID NO:900:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCGGCC TTCATGGCCT AATTTCCATC ANGAANTCNG TGAGGTTCTC AGATGTGGCA	60
ATGTCCACGC AGTTTCGCAC CANGGCATGG CGGTTCTTGT CTCCCATTTT TGGCTGTCCC	120
AGGTAGCGCA GATGCCAGGG TGCCCCTGCC CTGTCCATAG AGCGTCGGGC CCTGAGAACA	180
AATGGGCTGG CTTGCTGGNC CTTAAGGAGG AATACCATCT CATGGTCAAG GAAAGTCTCA	240
GGTTCCATGT TGTACACAA ACCACGAAGG CGGTGGATGA GGCTTTCCAA ACTGTGATCT	300
AAAACACTTC CCTGCAACAG GTACTCCATC ATGTTAATGG TGCCCCAGT GACAGGGATC	360
ATGGTGACTG GAGGTGCCTC CATGGTGTCT AAGTTGAAGA CAACACAACCT GGACTCAGAG	420
CCCCCAGTCA GGTAAGGCAC GGGATATACC TCCTTGAGGC TGTAGTGTCT TCCTCGAG	478

## (2) INFORMATION FOR SEQ ID NO:901:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

GTACCAGGCG	NATCCTGAAG	AGACACTACT	ACNACCAAAT	GGAACCCAG	AAGAAATAAA	60
ATGTTTGGAT	CNAATAAAGA	AAATTGAAAC	NACTGGTTGC	NACCNAGAAA	TAACATCATT	120
TGAAATTAAT	CTGAAGGAAA	AAAAGTACCA	GGAGGACTTT	AACCCGCTGG	TGAGAGGATG	180
TTCCTGTTAC	TGCTGTAAGA	ATCACACTCG	GGCATACATC	CACCATCTGC	TGGTGACCAA	240
TGAGCTGCTG	GCCGGAGTCC	TGCTTATGAT	GCACAACCTT	GAACACTACT	TTGGGTTTTT	300
CCATTACATC	CGGGAAGCAC	TAAAAAGTGA	CAAACCTGGCA	CAGTTGAAAG	AGCTCATCCA	360
CAGGCAAGCA	TCTTGAGATC	TTGCAAATAC	AAGTCTCACT	CTTCACACTG	AGCCTGTACC	420
ACTGTTGTAA	CATGGGAAGA	CGTGAAGAAG	AAATAATCTG	AGCTCGAG		468

## (2) INFORMATION FOR SEQ ID NO:902:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

GAATTCGGCC	TTCATGGNCT	AGCCAGGGAT	AAAAATACAA	TCTTCAAAGC	GGTCAGAGAA	60
AAAATGCAAA	TTATGAACAG	AGGCATCAAG	GTAACAATAA	CAGCCGAATT	CTGGTCAGAG	120
ACAATGCAAA	CCACACATGA	GCAGAGCGGN	CCCTTTAAAG	AACTCAAAGG	AAAGAAAAAG	180
TGAATCGACC	TGGAGCTCAG	AGCCAGATAA	AATATCTTGA	AAATATGAAA	GTAAAAAATA	240
GAGAAGAGGA	GCTCATGAGG	GGAGAGGGAC	TAGTGTAAGG	AAAGGTGTGT	AGGTGGGAAA	300
AGGNCCAGTG	TGTTTCAGCA	TAGATAAGAA	AAGNAGACCA	CGCNAAAAGG	TAGACGAACA	360
GGCAAGGTTG	GTCATCAGGT	GAAAAGACAG	GTTAGTGGAC	GATCAAAGAG	GNTCTTGACT	420
GCCGTGCTAC	AATAAACTAC	ATATTTTTTT	TTCAGGCAAA	GTAAGGATTT	CAGAGATGAT	480
TTTTAACATG	GGATGATATA	ATGCACAGTA	TTTtagaaat	ATTGTTCTAA	ATCAAGAGTG	540
GGAACCCAC	TGCGGAGACA	AATTCTCGAG				570

## (2) INFORMATION FOR SEQ ID NO:903:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

GAATTCGGCT	TCATGGCCTA	CTCCCATCAA	ACTCCAGAGA	AGAGAGTGAA	TACTGGAGAA	60
GAAAGGAGGA	AAATATCTGA	GGAAGCAGCA	AGAAAGAGAA	GGCTGGAATT	TATTGAAAAA	120
GAAAAGAAAC	AAAAGGATCA	GATTATTAGT	TTAATGAAGG	CTGAACAAAT	GAAAAGGCAA	180
GAAAAGGAAA	GGTTGGAAAG	AATAAATAGG	GCCAGGGAAC	AAGGATGGAG	AAATGTGCTA	240
AGTGCTGGTG	GAAAGTGGTG	AGTAAAGGCT	CCTTTTCTGG	GCAGTGGAGG	GACTATAGCT	300
CCATCATCTT	TTTCTTCTCG	AG				322

## (2) INFORMATION FOR SEQ ID NO:904:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```
GAATTCGGCC TTCATGGCCT AAATGTATGT AAGGTACAGA GAGGATGTCT GGAGGTGCGC      60
CCTGTGGATA TCTTAAGCCT TTAAGGGTGA GCAAAAAACA ATAGGTTTAC AAAGGAAAAT      120
GAGAATGGGC TATGAGAAAG GTAAGAGGAA AACCAAGGAA AGAGAACGTT TTGAGACAGT      180
AGTAGTGGTC AGCAATGTCA AATTGCTGCA GAAATTTTCT AAGAGTGAAA TTGGGTTTAG      240
CAGCTGCAAG AGGAGTTCAT TTAATTGGTG TAGCAGAAGC CCATTAGATT GCAGTGTGAT      300
GAGAAATTAT TGGGAACAAG GATACTCGAG                                     330
```

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```
GAATTCGGCC TTCATGGCCT AGATGCCGCC ATCTACCAGG CCTCTGCCCC AGAACAGCAA      60
GGGCATGTGT TCCTGCTCAG GGGTCCTGGA GGTGGGCACC ATGACTGAGT ACAAGATCCA      120
CCAGCGCTGG TTCGCCNAGT TGAAGCGCAA GGCTGCGGCA AAGCTGCGCG AGATCGAGCA      180
GAGCTGGAAG CACGAGAAGG CCGTGCCTGG GGAGGTCGAC ACTCTGCGCA AGCTCAGCCC      240
CGACCGCTTC CAGCGAAAGC GGCGATTGAG CGGGGCTCAA GCGCCGGGCC CCTCGGTCCC      300
TACCAGGGAG CCTGAGGGTG GGACCTGGC GGCTTGCCAG GAGGCAGAGA CTGAGACTGC      360
TCAGCACTCA GGTTTGGGCC TGATCAACAG TTTTGCTTCT GGAGAAGTGA CCACCAACGG      420
GGAGGCTGCC CCCGAGAATG GCGAGGCTCG AG                                     452
```

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```
GAATTCGGCC TTCATGGCCT AGCCATGGAT TTAAGAAAT TGTGACTAAA CCAATGTTTT      60
AGCATTGATA AATGGGAAAT TGCAGGAAGG TGTAACGTA GAGTTTAACT CTACAACCTG      120
GCTTAGGGAC TCAGGTATGG ACAGTGAGAA TAACTTGGTT TAGGGACTCA GATATGGACA      180
GTGAGACTGG CCACATGAGT GCCTTTCTCA CTGTCACACT CTTACCCAGG TTGGAGTGCA      240
GTGGCTGTCT ACAGGTGTGA TCATAGCTCC CTGCAGCCTT GAATTCCTGG GCTCAAGCAG      300
TCCTGCCTCA GCCTCCCAAG GAGGTGGGAC TAAAGATGGT GTGCCACCAC ACCTGGCTAA      360
TTTTTAAATT TATTGTAGAG AAGGGGTCTT GCTATGTTGC CCAGGTGGT CTGGAACCCC      420
TGACCTCCAG GGATCTCTCC TGCTTGCC TCCTCAGGAG CTGGAACACT AGATATATGC      480
TAATGTCTTC AATTTATGGA AATGCAGAAA TGCTCGAG                                     518
```

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

GAATTCGGCC	TTCATGGCCT	ACTTGCTGCT	GCGCTTTGAC	ATCAGCTTGA	AGAAGAATAC	60
CCACACCTAC	TTCTACACCA	GCTTTGCAGC	CTACATCTTC	GGCCTGGGCC	TTACCATCTT	120
CATCATGCAC	ATCTTCAAGC	ATGCTCAGCC	TGCCCTCCTA	TACCTGGTCC	CCGCCTGCAT	180
CGGTTTTCTT	GTCCTGGTGG	CGCTGGCCAA	GGGAGAAGTG	ACAGAGATGT	TCAGCTACGA	240
GTCCTCGGCG	GAAATCCTGC	CTCATACCCC	GAGGCTCACC	CACTTCCCCA	CAGTCTCGGG	300
CTCCCCAGCC	AGCCTGGCCG	ACTCCATGCA	GCAGAAGCTA	GCTGGCCCTC	GCCGCCGGCG	360
CCCGCAGAAT	CCCAGCGGTC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 630 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

GAATTCGGCC	TTCATGGCCT	ACCCCTGTCC	ACTTTGGTCA	CTGTTGGCTG	GGGCCCCGTGG	60
AGCTGTCCAG	AGGGGACCGG	GGCCAGTAGA	GTAGAGGACA	GTATTTGTAG	AGCAGGCATT	120
TCTTCTGAGG	TTCCTTGGGA	TCCCCTGAGC	TATGAAAGCT	GGAAGCAGTT	GAAAGTTTTC	180
AGGGAGAGGG	ATGCTGGAGT	CTCAGAACTT	TAGAGGTGCT	GCAGGAGTCA	GTTCTGGCAG	240
TGAGAGAACA	CTTGGGCGGG	TTTCACACAC	ACACAGCACT	TGAGCCATTC	TTGGGCAGAA	300
GGGGCCTCAC	TTCCAAGCAC	AAGGAGTGTT	AACGAAAAAT	TATTAACATG	GTAAGGAAGA	360
CTTTATTCAG	GGCCATTGCA	GTAGGCATCC	CAATAGTGGG	GAGAGATGGG	GCTCAATTCC	420
AAGTACAAGA	AGAACAAGTG	GGCACTTAGC	CAAGGAGCAG	GTGGGAGGGG	GTCAGAGGAT	480
AGAAAATTAC	TAAGAGGAGA	CGTCAAGGTT	AGGGGGATTG	TTGCTGAAGT	CAGGCCAAGG	540
AGCAGGTGGG	AGGGGGTCAG	AGGATGGAAA	ATTACTAAGA	GGAGACGTCA	AGGTTAGGGG	600
GATTCTTGCT	GAAGTCAGGC	CTTGCTCGAG				630

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 678 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTCGGCC	TTCATGGCCT	AGACGGTGAT	GTTTTTGGTA	AACAGGCGGG	GTAAGATTTG	60
CCGAGTTCCT	TTTACTTTTT	TTAACCTTTC	CTTATGAGCA	TGCCTGTGTT	GGGTTGACAG	120
TGAGGGTAAT	AATGACTTGT	TGTTTGATTG	TAGATATTGG	GCTGTTAATT	GTCAGTTCAG	180
TGTTTTAATC	TGACGCAGGC	TTATGCGGAG	GAGAATGTTT	TCATGTTACT	TATACTAACA	240
TTAGTTCTTC	TATAGGGTGA	TAGATTGGTC	CAATTGGGTG	TGAGGAGTTC	AGTTATATGT	300
TTGGGATTTT	TTCGAGGGTG	TAGGGATGCG	AGCTCTGGAG	GGGACCCCTC	TTTCAGGACA	360
GCGCCCTGGC	CCCCAGTGCC	CCACTCACCT	TCCTGGGCGG	GAACCTCAAG	TGCAGCCAGG	420
CTGGGGGACA	GAGTTCCCCC	CAAGCTGAGA	CAGGAGGGGT	CTCAGGCGGC	AAAATTCTCT	480

CTCCAACTCC	CTGGGGTG	GGGGTCATGG	ATGAGGGGGG	CCCCCTTT	CCCCAGCCCA	540
CTCAGGGCAC	CCCTGGCCCG	TCCCGCCCCA	CCTCCAGCTG	CTTCATGGTC	TCCTCCAAGC	600
TGAGCAGGTT	CTCCTGGATT	TCCTGGGTCC	GTGCTGGGCT	CAGGGGGCCG	CCCCCTGGGA	660
CCCCATCCCC	ATCTCGAG					678

## (2) INFORMATION FOR SEQ ID NO:910:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

GAATTCGGCC	TTCATGGCCT	AAGAAGAGGA	GGAAGAAGAC	GGGGCTGCAG	TTGCTGAGAA	60
ATCACATCGA	AGAGCTGAAA	TGTAGCGGCA	CCCAATTTCT	AGACAACGCT	CAGCCAACGG	120
ATTCTTTTCA	AGCTGCTCAA	ACATAAATCT	GCCTACTGAA	CTCTAGGATA	TTTAATTACA	180
AAAATTAAGA	ACTTAGACTT	TTTTAAACT	TTGTATTAG	AAATGCGCAT	ACATTTATAT	240
GAATATATTT	TGATAACGTA	GGTCTAGAGC	TTCTTTTATA	TTCAAGCTTA	ACATGANAAA	300
GAAGAAAAAC	AATAAAGTAA	ACCTGAGCCC	CCACGTCCCA	ATTTTTTAAT	AGATTATGTG	360
ATGTTGGAAA	GCTCATTGAT	TTGTATATG	TTTCAGCGTG	TTACCTTTCT	GGCTTCCAGT	420
TCCCAGGTGT	TCTTTGTTTG	CCTTTGATAA	AATACAGGAT	TTAAGAACAG	AGAGTACTGC	480
AAAATGCCAT	GCAGACTTTA	AAGAGAATGG	CCTGTTTACT	AATTGCTGCC	CTTCTGATGT	540
CTTTATGTAT	AGCTCTGATA	GAATTTTCAC	CAGTCTATGT	ATCTCTGGAG	TGAGATCCTA	600
TGTACAAAGT	GACATACAAT	TGAAATCCT	CGAG			634

## (2) INFORMATION FOR SEQ ID NO:911:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

CTCGACCTTC	ATGGCCTAAT	GAGCTGTTTT	GTAAACGAGA	TTTGTTTTGT	GGGAAAGGGA	60
ATTTTGTTC	AAGACTTCCC	TAAGAACTG	ATAGCATCGG	GTAATTCTTA	AATTGACTT	120
ATCATAATGG	TATATCTGGA	AGGAATTTGT	CAACTGATAT	GTTATAATTA	TTTTTTAATT	180
TTTTTTAATT	TTTGAGATAG	GTCTTACTCT	CTTGCCCAGA	CTGGAGTGCA	GTGGTGTGAT	240
CATGGTTCAC	AGCAGCCTCA	AACTCCTGGG	CTCAAGAGAT	CCTCCACCT	CAGTCTCCTG	300
AGTAGCTGGG	ACTAAAGGCA	TGTGCCACCA	TGCCTGGCTA	GTAAATTTTT	TTTTTTTTTT	360
TTAAGTAGAG	ATGAAGTCTT	GCTGTGTTGT	CCAAGCTGGT	CTCACACTCC	TGAGCTTGAG	420
CAACCTCCT	CTAGGCCATG	AAGGCCGAAT	TC			452

## (2) INFORMATION FOR SEQ ID NO:912:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (x) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGGCC	TTCATGGCCT	AGCGGGCTAT	GTGGCTGATT	GAAGAGTATG	CAATGAGCGA	60
TTTTAGGTCT	GTTTGTGTA	GGCAGATGGA	GCTTGTATA	ATTATGCCTC	ATAGGGATAG	120
TACAAGGAAG	GGGTAGGCTA	TGTGTTTGT	CAGGGGGTTG	AGTTTGATGA	GTTTAGGCAG	180
GGCCTGGATC	ACCTCTTTCT	TCTCCAGCCC	ATTGAGCACC	GGGATGAGGA	AGCGGACGTC	240
TGGCAGTCGC	TTGTGGTAGA	GATCCCGGAC	CCGCTTCACC	AGCTCTGGG	AGGGTGGGAC	300
TTTGCTGTG	AGGCTGTGCA	GACATCTCGT	GACCAGTGTC	TCTGCTCCCT	TGGGACAATT	360
TTCCACCAGC	AGGAGCAGCT	CCGGGGAGTT	CATGCCATT	CCTCGGATCG	GCTGCTCAAT	420
GACCCTCAGC	ACCGTCCGCT	TGATGTCGGC	GATGGCTTCA	GTGTACACGG	CCGCCAGTTC	480
GTGGATCAGC	TTGTGGGCTC	GAG				503

## (2) INFORMATION FOR SEQ ID NO:913:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

GAATTCGGCC	TTCATGGCCT	AAAAGATATT	ATTTTAAATT	AATTTTGAAC	TATAGAAAAG	60
TAGTACAAAT	AATTCAGAAA	ACTCCCATAT	TTACTTTACA	TGGATTCACC	AATTTTAAAC	120
ATTTTGCTAC	ATTTGTTTGC	TTCTCTCGCT	GTCTCTACAC	ACACATACAC	ACACAAATTT	180
TTGGGAGGTC	TAGTGACCGT	CCCGGCCGGC	CCAGGAGGAC	AGGAAAACAT	CACTCACGAA	240
GTCATCCTTG	GCCCCGAGCC	GCTTTGTCCT	GTCTTCTGTC	AGGAGGCCCT	CCAGGAGGTG	300
TCTTGCGGAA	TTTGTAATAT	TTGGTTTCAT	CTCGAG			336

## (2) INFORMATION FOR SEQ ID NO:914:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGGCC	TTCATGGCCT	AGACAGTCAA	TGTGGATGAG	AACTAATCGC	TGATCGTCAG	60
ATCAAATAAA	GTTATAAAAT	TGCAAAAAAA	AAAAAATAAA	AAGAAGTGAG	GATGACAGGA	120
GAAGGTAGAT	GGTGCAACAT	GAGGGTGCTT	TCTACCAACA	AGGTGTGCAG	CATTGGACAC	180
GCATGACCAC	GTGACCTGCA	GCTCTGATGG	TGCAACATGA	GGGTATGTCC	TACCAACAAG	240
GTGTGCAGCA	TTGGACATAC	TTGACCACGT	GACCTGCGGC	TCTGAAGGTC	CCACCTGTTC	300
TCGTTCTAAA	GTCACCATTT	CTGACCGCTG	TGCTGTGGAA	GGGGAGGCAA	TCAACCAGAA	360
CTCGAG						366

## (2) INFORMATION FOR SEQ ID NO:915:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```
GAATTCGGCC TTCATGGCCT AGGCAACAAG AGCCCTGAAG TGCTCCGGGC ATTTGATGTA      60
CCAGACGCAG AGGCACGAGA GCATCCCACG GTGGTACCCA GTCATAAATC ACCTGTTTTG      120
GATACAAAGC CCAAGGAGAC AGGTGGAATC CTGGGGGAAG GCACACCGAA AGAAAGCAGT      180
ACTGAAAGCA GCCAGTCGGC CAAGCCTGTC TCTGGCCAAG ACACATCAGG GAATACAGAA      240
GGTTCACCCG CAGCGGAAAA GGCCAGCTC AAGTCTGAAG CCGCAGGCAG CCCAGACCAA      300
GGCAGCACAT ACAGCCCCGC AAGAGGTGTG GCTGGACCAC GTGGACAGGA TCCGGTCAGC      360
AGCCCCTGTG GCTAGAGGAA CACCACTCGA G                                     391
```

(2) INFORMATION FOR SEQ ID NO:916:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 381 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```
GAATTCGGCC TTCATGGCCT ACGGGTGTTC GAGGAGTACA TGCGGGTTAT TAGCCAGCGG      60
TACCCAGACA TCCGCATTGA AGGAGAGAAT TACCTCCCTC AACCAATATA TAGACACATA      120
GCATCTTTCC TGTCAGTCTT CAACTAGTA TTAATAGGCT TAATAATTGT TGGCAAGGAT      180
CCTTTTGCTT TCTTTGGCAT GCAAGCTCCT AGCATCTGGC AGTGGGGCCA AGAAAATAAG      240
GTTTATGCAT GTATGATGGT TTTCTTCTTG AGCAACATGA TTGAGAACCA GTGTATGTCA      300
ACAGGTGCAT TTGAGATAAC TTTAAATGAT GTACCTGTGT GGTCTAAGCT GGAATCTGGT      360
CACCTTCCAT CCACACTCGA G                                     381
```

(2) INFORMATION FOR SEQ ID NO:917:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 621 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```
AGATGGACTG GCTTCAGCTG GTTTTGGAGG TGCTTGTGTT TGGAANAAAT GCAGGGATGG      60
CAGANGCCTG GCTCTGCAGC CAGGANCCAC TGGTGCGCAG CGCTGAGCTG GGTTCACGGG      120
TCGACGAAGT TGAGAGCCTC ATCAAGCGGC ACGAGGCCTT CCAGAAGTCA GCAGTGGCCT      180
GGGAGGAGCG ATTCTGTGCG CTGGAGAAGC TTA CTGCGCT AGAGGAGCGG GAGAAGGAGC      240
GAAAGAGAAA GAGGGAGGAG GAGGAGCGGC GGAAACAGCC GCTTGCTCCC GAACCCACAG      300
CCAGTGTGCC TCCAGGGGAC TTGGTGGGCG GCCAGACAGC TTCTGACACC ACCTGGGACG      360
GAACCCAGCC ACGGCCACCA CCATCCACAC AAGCACCCAG TGTTAATGGA GTCTGCACAG      420
ATGGAGAGCC CTCACAGCCC CTGCTGGGAC AACAGAGACT TGAGCACAGC AGCTTCCCCG      480
AAGGGCCGGG ACCTGGCTCA GGGGACGAAG CCAATGGGCC CCGGGGAGAG AGGCAGACCC      540
GGACTCGGGG CCCGGCCCCA TCTGCAATGC CCCAGAGCAG GTCTACCGAG TCAGCCCATG      600
CTGCCACCCT GCCGCCTCGA G                                     621
```

(2) INFORMATION FOR SEQ ID NO:918:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

```
GAATTCGGCC TTCATGGCCT AACATGGGTG ACACGGATGT CTATAGTGTC CACCACATTG      60
TCTGGCATGT GGAGGAAGGA GGCCCAGCCC AGGAGGCAGG ACTCTGTGCT GGGGACCTCA      120
TCACCCACGT GAATGGGGAG CCTGTGCATG GCATGGTGCA TCCTGAGGTC GTGGAGCTGA      180
TCCTTAAGAG TGGCAACAAG GTAGCAGTGA CCACAACGCC CTTCGAAAAT ACCTCTATCC      240
GCATTGGTCC CGCAAGGCGC AGCAGTACA AGGCTAAAAT GGCTCGGAGG AACAAAGCGAC      300
CCTCCGCCAA GGAGGGCCAG GAGAGCAAGA AGCGCAGCTC CCTCTCCGG AAGATCACGA      360
AGCAGTCGAA CCTGCTGCAT ACTAGCCGCT CGCTGTCGTC GCTGAACCGC TCGCTGTCAT      420
CCAGCGATAG TCTCCCGGGC TCGCCTACGC ACGGGCTGCC GCGCGCTCG CCCACGCACA      480
GCTACCGCTC CACGCCTGAC TCCGCCTACC TAGGCGCCTC ATCCAGAGC AGCTCCCCAG      540
CCTCGAG                                         547
```

(2) INFORMATION FOR SEQ ID NO:919:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 610 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

```
GAATTCGGCC TTCATGGCCT ANACACTCTT CCTCTTCTCC TTTTCCTTT AGAGATATGA      60
ATCAGGTTCT TGATGCCTAT GAAAATAAGA AGCCATTTTA TCTGTACACG GGCCGGGGCC      120
CCTCTTCTGA AGCAATGCAT GTAGGTCACC TCATTCCATT TATTTTCACA AAGTAAGTAT      180
NGGATCTTAT GGCTTTTCTT ACTCTCTTAG TGAATTGAGA ATGTTGCTTA TAAACCATGT      240
TTAGAACTGA CAAGATCATG CTAGTTCATT TGCTGAGCAA CCAAGATGTC AAGAGTTGGC      300
ACTTTTTTGG CTTCATTCA CTTTGTTCTT GGGCTCACTT TAGAGGACCA TGGAGTGATG      360
GGGAGAGCGC AGCTTTGGAG TCAGCCAGGC CTGCTCCTCT TCTCATCCTG CTCCCTGTCT      420
GCATGGCCAT GGGCCTGCTA CTTCTCTGAG CTTAAGTTTC CACATCTGCA AGATGAGAAT      480
GAAGATACCT ACCTCATAGA ACTACTGTAA AGCTTCAAAA CAAAGTGTGT AGAGCAGCTA      540
ACACAGAGCA CACAGGGCCA CCTGGTCGAT AAATGGTAGT AGACCTTATC ATTATCCATA      600
GTCCCTCGAG                                         610
```

(2) INFORMATION FOR SEQ ID NO:920:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 308 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

```
GAATTCGGCC TTCATGGCCT ACTAACTCTC CTTCTCAAAA CACCAAAAGT AAATTTTAAT      60
ACCCAAAACG AAATTCATTT TGTTAATCAC AGCTTAGAAG GTTTCATATG ATCTGGCCAA      120
ATCTGTATCT TGCATCACTC TTATCACTCC CCCTCTCTGC TCACTGTATC TGCATGATAG      180
```



GAATCAGCTC ATCTTCCTAT ACATCAGTAC TAAACAACC TCACTCCATC CTGAGGCCCT	240
GTGTGCTGTC TGTAGATGGT CCATCTTCTC ACTTCACTCA GGACTIONAAT GTCCCTCTT	300
CACTCGAG	308

## (2) INFORMATION FOR SEQ ID NO:921:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 293 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GCAACCGGGT TTTGCCAGGG CCTATTGCAC CAGAGAGCAG CAAGAAGCGG GCCCGTAGGA	60
TGCGACCAGA CCTTTCTAAG ATGATGGCCC TCATGCAGGG TGGAAGCACT GGGTCTCTAT	120
CTCTGCATAA CACGTTCCAA CACAGCAGTA GTGGCCTACA GTCTGTGTCA TCTTTGGGTC	180
ACAGCAGTGC CACTTCTGCA TCTTTGCCTT TTATGCCATT TGTGATGGGT GGTGCACCAT	240
CATCCCTCA TGTAGACTCC AGCACCATGC TTCATCACCA CCACCACCTC GAG	293

## (2) INFORMATION FOR SEQ ID NO:922:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 492 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC TTCATGGCCT AGTGGGGCCT GTTTATAGTT GACTGACAGT AAGTTCTATA	60
TGGTATATAA CACTAATTCT CTAGTCTTCT GGGCATATCT ACGAACAAAT ACAATCCAAA	120
TATTATGAGT AACTGGGTG TGACCACTGC ATGCATTACA CTGAAAGAAA CACCAACTCG	180
AAGCACAAAT ATATTATTAT TATATTTCGG CTCAGCTCTC AGTGGGGAGA GCAGCTACCT	240
CGGACCACAA TGCCATTTAA ACCAGATTCT TTTCAAATAA AATTCTCAAT CTAAGTGGA	300
AGCCCCCTCA GAGAATGCCT TATCCCCTA CTAAGCAATC CAGGCTTGTA TAAAACGTCT	360
GATAAGGCCT GTAGTGCCCA TTGAGTATGA GTCTGCTGTT TACATTCTGC ACAGGCCAGG	420
AGGGGAACAG AAGGTGTGAG CCACAGGTGC TCCTGGGTCT GACCAGCAAG TCTAACCCAT	480
GAAGATCTCG AG	492

## (2) INFORMATION FOR SEQ ID NO:923:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 650 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

AAATAACCAC AAATATNAAG AAATTATAAT CAGGGCAACA GATTAAATG AAAAGGGGTA	60
TAGAAAGATA TATTTTAGAT AATATAAAT CCTGACAAGC TATGCCCTAG AATTGCAGCC	120
TCCAAACCTT GCCCANGATT TCCACCTTTC CATAGCCTCA CTTCAAGTTC AAATGGAAAT	180

GAAAACAA	TAAAGTGAAC	AGGTGGTTGA	GCCAGCCNAA	GCC	CCAAG	TTATGTTAGG	240
TGGACAGTAA	GACCAGGTGG	ACAGCATTG	AGAAACTGGC	TGGACACAGG	GGAGCTGCTA		300
CTGGTAGTTA	TATTTAATTT	GGAGGAATTT	CCAGCCCACT	GATAAAGAGA	GAAACCAAGG		360
AACCAAATGA	CTTTTCTAGT	AACATATAAT	ATATGAGATG	AAATATAATT	CTGTTAGAGA		420
GGACATGGTG	GTGAGATGGG	AAAGAAAAGA	GAAGAGAAAC	AGGCAGACTT	CGGGCACCAT		480
CTCCCTTTGT	TTTCTACAAT	GCATTGGTTT	CCTTCTGTTG	CGGAGCATTC	TTTAGGATTA		540
GCTACAGACC	CCAATGTCCT	CTGAGTAAAT	ATATGTCAGC	TCAGCTCCTG	ACATGATATC		600
CATGCTTATT	GGCCTCCTGG	AGGGCTGGGT	GTTTCTCAGG	GTCCCTCGAG			650

## (2) INFORMATION FOR SEQ ID NO:924:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

TGAGCTGCGC	TAAACTCCAC	CGTGACCTCA	AACTCTTTGG	ACTGTTTGAA	AAAAAAAAAA	60
NTNGGAAGAA	ANTCCATCCT	CCAANANAAT	CGGCTTAGGA	GGAGATGGAA	CTTNNCCCT	120
TTCTCTNGGT	TTNGTCCGTC	TGGTGGTCTC	GAACCTGGGA	TTCGGCGAAT	GCGGATTCTGA	180
TCATTACAT	CGGAGCAATT	TTTGATGAAT	CTGCCAAAAA	GGATGATGAG	GTATTTCTGCA	240
CTGCGGTTGG	TGACCTTAAC	CAGAATGAGG	AGATCTTACA	GA CTGAGAAA	ATCACATTTT	300
CAGTGACGTT	TGTTGATGGC	AACAACCTT	TCCAAGCAGT	TCAAGAAGCC	TGTGAACTTA	360
TGAATCAAGG	CATCTTGGCC	CTGGTCAGCT	CCATTGGCTG	CACGTCAGCA	GGATCCCTCC	420
AGTCTTTGGC	AGACGCCATG	CATATCCCC	ACCTCTTCAT	TCAGCGCTCA	ACAGCTGGGA	480
CCCCAAGGAG	TGGCTGTGGA	CTCACCCGGA	GCAACAGGAA	TCTCGAG		527

## (2) INFORMATION FOR SEQ ID NO:925:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

GATTCGGCCT	TCATGGCCTA	GAACCTTCTA	CTTGGACAAC	TAACACCCAC	AGTCCTCCAG	60
ACAGAAAGAC	AACAGGTACA	AAGCCCTAAG	GATTATAAAG	GTATGCTGCT	TACCATCATC	120
TTAGTGACCA	AGGCAGCGAA	GCTGTTTCTG	TACCTTGGAA	CAGTCTTCCC	TGACAAGCCA	180
GAGAACAGTG	ATAAAGCCAC	CAGCCTTGGG	ATCAGGACTG	AAAAGGCAAG	AGTGATGGAG	240
ATTTCTCCTG	CGCTAAGCCA	AGAGAAGGTT	TCAGCACTTC	AGACAGCTCC	CACCGAAGTA	300
GCCGATCTCG	AG					312

## (2) INFORMATION FOR SEQ ID NO:926:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

(xi) NCE DESCRIPTION: SEQ ID NO:926:

GAATTCGGCC TTCATGGCCT AAGATGTTG TCTTTATCCA GTAAGGTGTT TGTATGCTCC	60
TTAAGTGGCA GCGGGGAGTG AGCAGAGCAG TGAAGATAAA CATGAAAGCT GGTGGTAACA	120
AATCCTGATA CCTCCTCTAT TCCAAAAGGA AAGGCAGAAC TCAGAGGCAC CATCCTCTG	180
TTGTGTTTGC AAGCTGTTGA CACAACCTGG AAAGGTAAAG AGTTTTCAAC AGACTTGCTA	240
GAGTTTGTGT TCAATGGAAA CTGACAGAGC CTACCGGCTG AGGGGCTAAT TTTAATAGAA	300
ATAACCTAGG TGC GCGCTCG AG	322

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

GAATTCGGCC TTCATGGCCT AGTGGAACTA GACTGCCAGC TGTGAGCCTC AGAGCTCCTG	60
GCTGCCTGTT GCTGAGTCTA TCAGCTGCTG AGCCTTTCTC ACCNNAAAAA AAAAAAAAAA	120
AAAAAAAAAAN TGNGCTTAAT AAAATAACCC TGCACAGAAA TTTTCTGAAA TTAAGATAAC	180
ATTCAATGGA AAACAGAATT TAATCTACAG AAATACACTT CACAGATGTT TTAGGAACAG	240
AACCTAGAGA AAATGAAAGT CAAAATTTAA TAAAAGAATT TGTCAGGAAC TTCAAGGTAA	300
AGACTCCATG TATTTTTTGG CAACTATAAA AACTAAGAA GGCTTTTTTA ATATTAAAAA	360
GCCATTTAAA CACTTCAAT TAAGATTCCT CAATATACTT CAGATTTCTG TACTGAGTTA	420
CCCTCTCGAG	430

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

GAATTCGGCC TCATGGCCTA CGTTAGTGTG TGGATAGTAT GTGTGTGTCC GCACTCATGA	60
TAACTTGAAA CCAGACATAG GGTTCAATTT TGAAAGGTTA AACCACACTG TTTCAGGAAC	120
TTGCTCCAAA TACTACTTGG TTATCCCTTC CTTTACCAGT TAGAACTAAA GAGTGTGATG	180
TATGAACACA CTGGGTTGGG ATTTTCTGTT GAGGATATGC AGGGCATTTC GGCATGAGGC	240
AAATACAGAA GCAAGATTTC ATTCTACTTG GTGATTTGAA TCATGACAGT CCTCATTCCA	300
ATCTCTCTTT AATTCTCTCT GGCCCTGCCC AACTCTGTA TTTGAAAATC TTGTTTTTGC	360
TCTTTCCGGA GCTTCACCCC TCTACTTACA TATTGTAAAG TTGTATAAAT CTATCATTGA	420
AAGGTCCTCT CTGCCAGCAG TGGTGCCACC CTTGGTTTG CTGTGGTACT TTGCTGTGTA	480
CTCCGTGGCA TACTCGAG	498

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

( MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC	TTCATGGCCT	AGTTAAGGGC	ATTTACTCAT	GTTGAACCTA	GTTTTATTTA	60
CAGTATATTT	GTATGCATAG	AAGATGGAGG	TCCACCAAAG	TGTTAATTAT	GCTTAGTTGT	120
AGGTCAGGTA	TAGCTAACTT	TCCTTTTTTA	ATATATATAT	TTACATTGTG	GTTTCCTTTA	180
TAATTTATGG	CATAGATTGC	CACGATTTTC	TTAAGTATAC	TTTTATAATC	AGAAAAATGA	240
TATTAAGGAC	TCATTTTAAG	TACACTAAAT	CAAATATTAG	AAGGCTTCTT	TATTTTAAGC	300
TAATTGTGAG	GATTATTTGT	CATTTAAAAC	TTTTGCTTCT	ACTTATTACC	CTGAAGTATC	360
TTTGTGGTGC	TTATGTTTTT	CACAGACTGT	ATAAATTGAT	ATACTCTCCC	GCCCCATGGT	420
AATGTTGCTA	CACATAAGCT	CTAATAATTA	TCATTTTTAA	TGTTTTAAGA	TTAATTCAAC	480
TAAGTTTTAA	AAATAATCCA	TTGGTTACAT	ACATAAGAAA	GTACTGTATA	CAGATTCCCC	540
TGACTTATAA	TGGTTCGACT	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GTGATATGAC	ACTGACAGAA	TTCAAGTTCA	TCTGGTACAT	GGAGTACTCA	CACCGAATGT	60
GGGGTCGCCT	TGTAGGCCTT	GTGAACATCC	TGCCTGCTGC	CTACTTTTGG	AGAAAGGGCT	120
GGCTCAGCCG	TGGCATGAAA	GGACGTGTTT	TTGCCCTCTG	TGGCCTCGTC	TGCTTCCAGG	180
GTCTGTTGGG	ATGGTATATG	GTGAAAAGTG	GACTAGAAGA	AAAATCAGAC	TCCCATGACA	240
TCCCTCGGGT	CAGTCAGTAC	CGCCTTGCTG	CCCACCTGGG	ATCAGCCCTG	GTTCTTTATT	300
GTGCCAGCTT	GTGGACCTCA	CTGTCACTGC	TACTCCCTCC	GCACAAGTTG	CCTGAAACCC	360
ACCAACTCCT	ACAGTTGAGA	CGATTGCTC	ATGGAACAGC	AGGTCTGGTG	TTCTTTACGG	420
CCCTCTCAGG	GGCTTTTGTG	GCAGGGCTAG	ATGCTGGGCT	TGTTTATAAC	TCCTTTCCCA	480
AAATGGGAGA	ATCCGGATCC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:931:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GGGAAATTAG	AAAGGGAGGG	CCTGAGTTGG	TTGCTATTCC	TGAAAGTTTC	TTTGAATGGA	60
ATACTGGATC	ATCGTTTTTG	AAGAGGTCTG	TTGTTACTTC	ATTATTACCT	CCTTTAGCAG	120
CACCCTTGTT	TTCTCCAAC	CTCTGCCAAG	ATTAGTGTC	TGTGTCTACA	TTTGCCCCCTT	180
CTGTTTCTCA	TACTCCCAGA	TGGAAATATT	ATATTTCTTA	GGACTTTTCG	CTCTATTTGA	240
ATTAGTATTT	TCTACTCGAA	ACACCCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

```
GAATTCGGCC TTCATGGCCT ACATTTACTT TTGTTACACA GGGCACTACT TTGATTTCTA    60
TTAGTGCTGT TTGTGATTGT GTATGTCTTT CACTTGAAAT CCACCATGAA GGTGAAAATT    120
TGTTTGAACC GTGGCACTAT ATGGCAGTGC AGTGTAGTCA GTTGTGTTTG TAGTCCGGAT    180
TATCAGAGCT TGAATTCTGG TTCTGCTGCT CACTAGCTTC TTCTTGACA CTGTTTCAGT    240
GTACTCAGCC TCACCTTTTA TTTTATTCT ACAGAGTCCC ATTTGGTGTG TAAGCTGGTC    300
TCGAG                                         305
```

(2) INFORMATION FOR SEQ ID NO:933:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 463 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

```
GCGGTGGCAC GATCTCGGCT CACTGCAACC TCCACCTTCG TTCAAGCGTC CACCATGCCT    60
AGCTAATTTT TTTGTATTTT TGGTAGAGTC AGGAGTTCGA GACCAGCCTG GGCAACATGG    120
CAAAACCCCA TCTCTACTAA AAATACAAAA TGTACTCAGG CGTGGTGGTG CCCGCCTGTG    180
ATGCCAGCTA CTCAAGAGGC TGAGGTGGGG ATCACCTGAG CCCAGTATGT CGAGGCTGCG    240
GTGAGCCATG ATTGCGCCAT TGCACTCCAT CCGGGTGAGA CTGAGACCCC GTCTCCAAAA    300
AAAAAAAAAA AAAGAAAGTG AAATAATTTG TGGACAACAC AGAATTACAA ACTTTTATT    360
TTGTCTTTT AAAGTTACCA CAAATTGTCA CCACCATTCT CTGAAAGGAC ATTAACACCT    420
GAATATATTT AGTTTCATGA AAATTTCACT TTTAACACTC GAG                                         463
```

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 290 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

```
GAGCATCCTG GGGAGCACCC ATTTCTGGG AACAACTGA CCCTTTTGCG TCCTTAAAAA    60
AAGTCGGCCA AGATTCCATA GTGCTGCTGA TCTGCATTAC AGTGTCTCTC TCCTACCTAC    120
CGGAGGCAGG CCAATATTCC AGCTTTTTTT TATACCTCAG ACAGATAATG AAATTTTCAC    180
CAGAAAGTGT TGCAGCGTTT ATAGCAGTCC TTGGCATTCT TTCCATTATT GCACAGACCA    240
TAGTCTTGAG TTTACTTATG AGGTCAATTG GAAATAAGAA CACACTCGAG                                         290
```

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 297 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC TTCATGGCCT AGTTTGGCCC GGCAGCCTCT CAGGTTGGAC TTCTCAGGAT	60
TTGCCATTTG TTTTAATCCC TGAGACCACA CAGTTGATGT TTAGAGCCTG CCCTGCATGT	120
GATCGTTCCA GTGGAGGATA CAGCATGGGG TCTGGCCTCC AGCAGGGTCC TCCCCAGGCC	180
ACCCCTGGGT GCCGGGAGGG CAGCCCCTTG GCCTGAGGCC CACTATGACC TGCCCCCTGC	240
AGCTGCACCG TGATGGTGGC TTGCCTTTGT GGCTCCCTGG GCTCTGGTGG CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 337 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GTTTAATGAA GAGTAGTCAG TCTTCTAGAT TGTTCTTATA CCACCTCTCA ACCATTACTC	60
ACACTTCCAG CGCCCAGGTC CAAGTCTGAG CCTGACCTCC CCTTGGGGAC CTAGCCTGGA	120
GTCAGGACAA ATGGATCGGG CTGCAGAGGG TTAGAAGCGA GGGCACCAGC AGTTGTGGGT	180
GGGGAGCAAG GGAAGAGAGA AACTCTTCAG CGAATCCTTC TAGTACTAGT TGAGAGTTTG	240
ACTGTGAATT AATTTTATGC CATAAAGAC CAACCCAGTT CTGTTTGACT ATGTAGCATC	300
TTGAAAAGAA AAATTATAAT AAAGCCCCAA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 299 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GAATTCGGCC TTCATGGCCT ACATAGTTAT TCAGATTAG GACCAGTAAG GATAGAAGTT	60
TCTCTTATTT ATGAAAAAAA ATGCTAATAA TTTTGGGGCA GTTTTTCCN TTAATTATTT	120
TTTTCATTT CAAGTTTAAT TTTATTTTAG CTGATCTGAT GTGGTTTCAA CTAACCCAAG	180
GTCTCACCAT GTTAAANGC CGGCGGACTC TACGGCGTTT TGTAGATCCC CCCCCCCCAC	240
CCACTGTGAA GGGGTGCCAT ACTACCTTAA ATGCTAATGC TAGATATGCA ACCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 403 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

CTCGAGTGGT GTGTCATTAT AGCGGACAAA GGTACGATC ACAAAGGTGG TGGCGATGAT	60
TCCCAATATT GCAACAAACA CAGGCACCAC AGCCCAGGGA GAATGCCACT CCAATTTGAT	120
GATGGGGATA AGCTGGCAGC CTGTGCGGTT CATGTTGGGT CTCTGATCCA GAGGGCAAAG	180
TTCACAGGAC AGCTCATCCA CCTGGTAGTT GTAACCTTCA CAGCGTTCAC AGTGCCAGCA	240
GCAAGGGACC CCTTTCACCG TTTTCTTCCT CTCCCCTGGC TTACACGGCA GGCTGCAGAC	300
AGACGCCGGG TGAGTATGTT CTCTATGAGC CCACTGCATG TCTTCCACTT TTAGATGAAG	360
CTGATTGGTC CAGTGGCCGA TGACTTTGTA CTCTGTGCTT TTC	403

## (2) INFORMATION FOR SEQ ID NO:939:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGCC TTCATGGCCT AATTCTTTTC TGTCCTTCAC ATGCATGTCA CAGTTCATCT	60
CACATTTCTG TGTAGAGGGC TCCATTTCTC TGCATATGGC ATTACCATTG TGCCTGATGT	120
ATTCCAATTG AGATAAACAT AAGCTCCTTT CTCGTGCTTT CCCTGAGACC CCTGGTGTGG	180
ACTTCTCTAA TGTTCTCATA ATATCTATGC ATCTCTCTAT GATTATACCA TGTTATACTC	240
TGTGTGGCCT TAGGCTTTGT GAGGAGAGGT TCAGAGTAGG TTTTGCTCTA GAGTGTGGTC	300
CTTACTCCTA AGGTGACCCC TTTCNGGTGT CTCTGCTGGT GTATGGCATT AATGTGATTG	360
CTTCACTCTC GAG	373

## (2) INFORMATION FOR SEQ ID NO:940:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GCAAGCTCTA ACCTAAATCA CAGAGACATG CATGTTTCAT GCATTAACAC TGATTTGCT	60
CTGTGGCCCA CCAGAGGGGT GGGCTCATGT CCCCTGACTC CTCACATGAG TGCCTCAGCT	120
CTAAGNCCCG TGGAACGGGG GGTAGGGAAG GTTTGCGATC TGGAGCTCAG CAACTGGCTC	180
AGCAACGTTT TCTCCATTTC ATTAGCACTA AACAAGTTTC TTGCTCTCAG GAATTTGTCA	240
GAAAAAAGAA TAACATCACC TGAGACTCCA CATACCAGAT TATAAACTCT TTCTCGAG	298

## (2) INFORMATION FOR SEQ ID NO:941:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	TTCATGGCCT	AGGTTTCCGG	ACACTTGGGA	CACGCGTTTC	CATCCTGGCT	60
CACTGAAGCC	TCGATCTCCC	AGGCTTTCTT	TGACGGTGTT	CCCTCAAAGA	AAGAGGCCCA	120
AAGCCCTCCC	CCGCAAAAAA	AGCCAGAAAG	GAATGGAGGT	GCCTCCGCAG	AAATCCAGAG	180
CATCTGCAAG	ACATCCTCGA	ATTCTAGACC	TGCCTCGAG			219

## (2) INFORMATION FOR SEQ ID NO:942:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCGGCC	TTCATGGCCT	AAGCAAGATG	GGTCTGAGGA	TACCTGTGAG	AAGTAATTCA	60
ACACATCTTT	CACACATGGG	CCAATTTGCT	GGTCTAAGTT	AAATNGGAGT	GACAAGGACA	120
GCTGCTTAAA	GAGTGAGTTC	TAAAGCCCCA	GGAATTAGGT	GATGTCTTGA	GCTGGGGTGA	180
AGCAAGNCAA	GTGGGATGGG	GAAGAGATGG	CTGGNTTCTG	CNGGAGTGAG	TTTAAGGGAG	240
GAAGGCAGGG	TTGCCCGGCA	GCCCCATGT	TCCAGAAGAG	CCCACGAGAG	ATGTCTGTCC	300
CACAGGGCTT	ATAGCACNTN	GCANTCCNTC	AAAGGGCGGT	GTCTCATGTC	CCNTCTGTTA	360
GGCTCTGGGT	GGGCTTTTGT	GACAGCTTTG	ATAATGTTCT	GGAAGAGATG	CTGCTGGGCT	420
TCTGGGCTCC	CGCGACCCCT	TAGAGAAAGT	GGTGCAGCTT	CTCATTGGCT	CTGTCTCTCT	480
CCGAACACGC	CCCTTTTGGA	GCCCTCTGGA	AAGGAAGACA	CTGAGCAACC	AAATAACATA	540
TTTTGACACT	AATTCCTGA	GACCGTCTCG	AG			572

## (2) INFORMATION FOR SEQ ID NO:943:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC	AAAGAGGCCT	AAGGAAATGT	GTGTCTCTAA	AACAGATTTG	GATTTTATTT	60
ATTTGGGACA	TATAAAAGAG	GAAGGAAGAG	TTGATAAAGA	TTCTTATTTG	ACTCTTCAAA	120
GTCACGTGTT	ACCAGAAATT	CAGAGAATCA	ACATACAAAT	TACAATGGTA	GTTTGTTTTT	180
TGGAAGGCCA	GTGAAATACA	GTCCTTAAT	TTATAATGAA	ATTTACTTTC	TAACAAATTA	240
AGTCTTTCTA	ATGAGACCAA	CATTGAGAAT	TCAGCCCTTA	CCTCGGGATG	GTCTGAGAAA	300
ACCAAAAGGC	CAACTGTTTT	ATTGCTTTAG	ATCAGTTAGG	TGATGATAAC	TATGAGCATT	360
TATAATAATA	TTTTAAATTG	GCCCTGAGAG	GCTTGAAGAC	ATAGAACTCG	AG	412

## (2) INFORMATION FOR SEQ ID NO:944:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:



GAATTCGGCC	AAAGAGGCCT	ACAAAAAAAA	AAAAAAAAAA	NNACTTGAAC	TGAGACCTGA	60
AANNGTAAAA	CTANNGNAAC	AAAACCTAGG	GAGAAAGCTT	CTTGACATTG	GCCTGGGCAA	120
AGATTTT TTT	GGATATGGCC	CCATAATGAC	ATAGGACAGG	CAACAAAAAA	AAAAATGGAT	180
AAATGGGATT	GCATCAAAC	AAAACCTCTGT	ATAGCAAAGA	AAACAATCAA	CAGAGTGAAG	240
AGACAACCTA	CAGAATGTGA	GAAAATATTT	GCAAACCACA	CATTTCATAG	GAAATTAATA	300
TTCAAAATAT	ATAAGGAACT	TATGTAATC	AATAGCAAGA	AAACAAATAA	CCTGATTAAA	360
AAATGAGCAA	AGGTCAGTTG	AGAGAGGAAG	AGAAAAACAA	TATGAGTAAA	AGACTTTAAT	420
AGACCTTTCT	CAAAAGAAGG	TATGTGCATG	GCTGATCTGT	GCATGAAAAG	GTACTTAACA	480
TCATTAATCA	TCAGAGAAAT	GCAAATTAAC	ATCATCTCGA	G		521

## (2) INFORMATION FOR SEQ ID NO:945:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 327 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

GAATTCGGCC	AAAGAGGCCT	AGGTACACAA	AAGCAAACAG	AAAAACTCTT	AAGTTT TTTCT	60
GCAATACTAA	AGAAAGTGAG	ATAAGACTTT	AAAGTTAAAG	ATCTATAGAC	ACTTTAGGCA	120
AAACAGGCTC	ATAAAGCAAT	TAAAAATCA	ACAATTTAGT	AAAAACAGGC	TACATAGTAT	180
TTTGTTTTTA	CGTTTCATTT	GTCTATTGAT	CTTTAAATTA	AATTAGACAT	TTCTACTGTT	240
TTCCGTGACT	CTTATACACA	CCTGTTTTCT	CCAATGTTCT	CCTTTAGTAT	GGCTGGTAAT	300
TGTTTTGGTG	ATTGCCACCC	CCTCGAG				327

## (2) INFORMATION FOR SEQ ID NO:946:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 573 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

GAATTCAAGG	GCTAGGCGAG	TTATTGCAGT	CACGTCCTTA	AGTCAGCCGG	GTCCTCTTCT	60
TTTCCCTCAA	GGTGCCTGTG	TTTTCTATTT	CCCCGTCCAG	TCGGTGGCCC	CACCCAGCCC	120
CAGGGTGCTC	CCTTCCCCCC	TTTCGGGTTT	CTGCCTGGAG	GGTGTGGTTT	TCTCTCCAC	180
CTCGGTGCCT	GCCAGTAGAC	TGGAGTTCCC	CGCCACGCTG	TCGGTCCCAT	CTCATCACCT	240
TTCCGCTTTC	ACGCCCGTAG	CTAGTCTTGG	GACTGGCCCT	GTTATAGCCC	CAACTTATGC	300
GCTCTCTAAC	CTTTCCTGGC	TTACCCGGAG	TCACAGTTCA	GTTCTACTTC	TTTTCAATTC	360
TGTAGGGCAT	TGGTCTCAAT	TGGGACTCAG	TTTTCTCTCA	CACCCGCCGT	TCCTGTAGTC	420
TGGTTATATC	ACAGTTCATT	ATTTAATGTA	GGTTTTTGAG	CGCTTTGTAA	ACGGCAAAGC	480
TCTCTCTGTT	AATAATACAT	ACTCAAAATG	TTATTCTTTC	ATTGGTGCAT	TACAACTCAG	540
TTGTTTGCCT	CTGAATCACT	TTCCCGACTC	GAG			573

## (2) INFORMATION FOR SEQ ID NO:947:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

GTTGAAGTCA TTTATTATTT TATAAATTGA GAACAACCAC ACCACCAAAT GTCACACCTT	60
CTTATAAAGT GTGAACAAGG AAGGTCATGT TTTTGTGGGT ATTTTGTGAG ACTTAGAGGT	120
TTCATTTCAG GGCATAGTCA AAGGCATCAT CCTCCCACT ACCCACTTGA TTATGTATTT	180
CAGATCCCTC CGTGGGGGCC TTCTTCTGAC AGAGAATTCT TTGAGGTACG CAGTAGTGCT	240
TTTGTGAGCA CAGACTGCTA ATCTACATCT TGCTGCGTTC TGTTTGCTGA GGTGGGCTT	300
ATTCATTTAA CAGTACCAA CCATTATCAC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 372 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

GAATTCGGCC AAAGAGGCCT ACGGCCAAAG AGGCCTAGTC GGAGGAGGAA ACATATGTAG	60
GGAACAGCCT GGGTCTTGTG AATCCGTTTC CCAGCTATGA TGCCTATTTC CTCAGCAGAA	120
TGAGTGTAGC ATGTCTCCCA GGTCTGTTTT TTATTGTGTTT GAGAGGTGAT TTCAAGCAGA	180
ATCTCACAGC TTAGTGTGG AAATGCTATC AGTTGTAAAG ATAGGGAAAA TCTCTCTTCC	240
ACTACGGTGG TAGGAAATGA ATACATATCA TTTCCAGCT TCCAGGATGT CCTGTCATCT	300
TAAGTGTGCG TCCCAAGGA CCTACAGATC ACAGGGCAAC AGGGGCTGTG AAAGAGTAGC	360
CCGGGGCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 450 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

CTAGCATTAC GAATCTCTTA GGATTTTTAA GATTGTATTT GATAATACTT ATATTTTACA	60
GGGCACACTT TTGGCACACC TCAGAGCACA CTGCTGCTAT TTTGGGTCAT ATCACTGTAA	120
AATACATAAT AAGTACTACT TAACTGTGAC ATGAAGAATT GGAATCCCAG AGGGCAACAT	180
TTGATTGAC TAAGATCAGG CATAAGATAG AATTTTGTG ATTTTTCCTT GCAGTTTTAT	240
TGACTTAGTT TATGAGCTTG GATAAAATAA TTTTGTGATG AATCATGTCA ATAAAAGGAA	300
AAATAATGTA ACTACCTCAT AAGTCTGATA AAAGGAAGTT GCTAGTGTTT TATAGAATTT	360
CTGAAGGTGG TTAAATCAAG TATGATTTCA AAATATCAAC TAGTTCCACT TTTGTGATTG	420
CAGGATGCTT CTTATACTAA AGTTCTCGAG	450

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```
GAATTCGGCC AAAGAGGCCT ACGTAGGCAA AGGTTGACCC AATCAAAGAT AAAAGAAAAT    60
CGACAGCAAA TCGTTCGTGC TCGAAAATAT TATGATGATT ATAGAGTTCA GTTGTGTGCA    120
AAAATGATGA GAATGAGGAC CCGGGAAGAA ATGATATTTA AGAAACTGTT TGAAGAAGGT    180
TTAAACATTC AAAAGCAAAG ATTACGAGAC CTAAGAACT ATGCCAAAGA AAAGCGAGAT    240
GAACAAAGGA GACGCCACCA GGATGAACTG GACTCCATGG AGAACTACTA TAAGGACCAG    300
TTTTATTGTC TGGCAGAAGC CATATCACAG GAACAACTCG AG                      342
```

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```
GAATTCGGCC AAAGAGGCCT ACCCTGTTTT AATCACATGA CTACCTGTCC CAGTACACGA    60
AAGGGCGCTG GTTGGCATTG TTCTTAATGT ATTTAGTAAA GATTATAAGA CATCCTTTAA    120
GAGTTTAAAT GTCTCTGAAA CAGGCATACA GGCTCTAGTC AAGAATGAAT TAGAGTGAAG    180
GAAAGCTGTG TGACACCTGG CATTCTCTC TGTTCATGGA GCTTCTTTGA GGCTTGAAGT    240
TTGATTTTAC TATCTAGACC TCTCTGGCTA ATACCTATTC TTCAACCACC TCGGTTACTC    300
TGACATAGGA ATTTACTTCT TTTCTTGAG TGGAAAACAC TTTAGAAAAA AATAACAAAC    360
ATTATTATAA ACTAATATAT GTGAGAGTAC TTAGTTGAAA CAAAAGGAA TTTTAGTAGA    420
CAGTATTATA TTATCTTTGA AAATCAAGGA GAAGTTTATG CAACTGAAAA TGTTTACACA    480
CTGTGCTACT CGAG                      494
```

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```
CAAAGAGGCC TAGGGAGTGT CGCTCTGTCA CCCAGGCCGA GATTGCACCC CTGCACTCCA    60
GGCTGGGCAA CAGTACGAGA CTCTGTCCAA AAAAAATAAA AAAGAACAGC CTTTTTAGGC    120
CACAGTGACC TCGCAATGT TTATATGCTT NGACCTACTA ACTTCTCCT AACTAAATAT    180
TTGATTTTAG GAGAGTGTGT AAATAAATTA CAGTATGTCT ATATGATGAA ATGTTATTTT    240
GCCATTAAAA TTTTGTTTAC AAAGATAATT TTTATTGACA TAAAAATNAC TTTAATGTAA    300
TTTATGTTGA AAAAGCTGAA TACAAGTCTT TATATAGAGT AATATTTGAG CTGTGTTCAA    360
AAATACATAG GAAAAGACTG ATAAAAATGAA ATATGGCNAA ATGTTAATAG TTTTCCCTGG    420
AATAGGATAA TAGGCAATTT TAAAACAGAC TCCTTTAAAA AAACAAACAA ACNAAAAAAA    480
CATAGACTTC TTTATATCTT TTGAGCTCCC CCCNACTCG AG                      522
```

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

GAATTCGGCC AAAGAGGCCT AGTGTGTTAT ACAGTTGTTG CCACTGCTGT TTTCCAAATG	60
TCCGATGTGT GCTATGACTG ACACTACTT TTCTCTGGGT CTGATCAATT TTGCAGTAGA	120
CCATTTTAGT TCTTACGGCG TCAATAACAA ATGCTTCAAC ATCATCAGCT CCAATCTGAA	180
GTTCTTGCTG CATTGTGTCA AAAGAAATTT CCTTATTTTC TACTGCCATT CCCATAAAAG	240
TAAGTAGTCT CATTTTGGCC ATATTCTGTT CATGTAACAG GCCAAGTGAA TCAATGAAGT	300
CTTTATTATT CTGATAAAAC TTGACATATG ATGCCAATTT AGCACTCACA AAAATGGTTA	360
AAAGATCATG AATAAGCTCG CCTTCCAAAA ACTTGACTGG TTTTAAAGTA AGAAGGTGGT	420
CAAAAAGAAA TGCATTTGGA TCTTCAATG CTCGTACAAT ACACCTGTGG GCATCAACTC	480
GAG	483

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 372 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

GAATTCGGCC TTCATGGCCT AGGTGCCCTC TGTGAAGCCA GTGTTCTCTG CTCCCCGGGT	60
CAGAGGTCAC AGGTCAAGTT CAGTCAGTCC GAAGAATCAT GGGCGGGTGC TCGCTGTCTT	120
CATCCAGGCG CAGGGCGCTG GCCTCGTCTC CCAGGCAGGC GCCACCCACA GCACCCAGGT	180
CGTCTGTGTA GGCTGCAAAG AGACGACGAA GTCACCCTTC AAAGGCTGGG GACACACCAC	240
AGACCCCATG ACACACACTG AGGACTGTGT TTTGGAAACA CTGGTGTATA TTTATAAACT	300
GAAGCCTGTA CTAAGACGTT CTGAATTCTG ATTGCTTTCT AATGAACTCT TTGCAGCCTT	360
AGGCAGCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 436 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTCGGCC TTCATGGCCT ACTATTACCA TTATATATCA CCCATCTGCA ACAAGGTACT	60
GTACAGACAA GTAAGAAGTA TGTTATCTAG TTCCCTTTCC CCCAGAAGGT TGAGGCTCAG	120
GTATAGGGGT AATTCTCCTG TGCAGTCTTT ATTTATGCTG ACTCAGTGAC TTCAACAGGC	180
TTAATCATGT GGTCAAGTTT GTTGCCAGCT GCATAATGCT CCCACATCTG TAGATAGAGC	240
CGCTCTAGTT CCATTGTGTA TTGTTTGGTG TTGAACAGAG GGCTAGATAT TCTTTGCTTC	300
CAGACTTTGC CACGAACTTT CTTCAGGTAT TCTAGATCAG TTCCAGCTT CACAGCTATG	360
TCTTCATATT CTTGTCTGTT TTTAGCAATA AGCTCAAGAC AACCTAAGCA AGTGAGCTGG	420
GATGCTGCAA CTCGAG	436

## (2) INFORMATION FOR SEQ ID NO:956:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```

GAATTCGGCC TTCATGGCCT AAGGAGATGG GAGAATGTCC GGGGAGGGGC TGGCAGGAGG      60
GGCCAGCCAA ACTGCACGGA CTTGCTGGT TAGTGAAGGA TTTTAAGTCC TCTAGTGGA      120
TTAAGTGATT AGATTTTTCG CTTACAAAGG AAACCTCTCT ATGGAGAACA AACTACCATA      180
TGAAGCTAGC GGCCTAAACC AGGAGAATGT GGGGAAAGAA GAGAGGTGAG GATAACTGGA      240
GGGGTATTAT GTAACAACAG AAAGCATCAC AGTTCAATGA ACAGGGCAAG GTGGGCAAA      300
GAAGAGGGCA GAGGAGGACT GGGCCCTCGA G              331

```

## (2) INFORMATION FOR SEQ ID NO:957:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```

GAATTCGGCC TTCATGGCCT AAGACTGTGA GTTCTGGGGC CAAGAAAAGT TTTGAATTGC      60
TCTCAGAGAG CGATGGGGCC TTGATGGAGC ACCCAGAAGT ATCTCAAGTG AGGAGGAAAA      120
CTGTGGAGTT TAACCTGACG GATATGCCAG AGATCCCCGA AAATCACCTC AAAGAACCTT      180
TGGAACAATC ACCAACCAAC ATACACACTA CACTCAAAGA TCACATGGAT CCTTATTGGG      240
CCTTGGAAAA CAGGTCTGTC CTCCACCTGA ACCAGGGGCA CTGCATTGCC CTGTGCCCCA      300
CCCCAGCTTC CCTTGCTCTG AGCCTACCCT TCCTCCACAA TTTCTAGGG TTCCATCACT      360
GCCAGAGCAC ACTGGACCTA CGCCCAGCAC TGGCTTGGGG TATATACTTG GCCACCTTCT      420
CGAG              424

```

## (2) INFORMATION FOR SEQ ID NO:958:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

GAATTCGGCC TTCATGGCCT AGATATGGCC AGGATGCTAT AGCATTGTCA GTGAGGAGAC      60
ATCACAGCTT TCCAGATCG GGAGGAAAAA TATGGAATGT GTTTTACCGC TGACTGAACA      120
CAACCAATG AACTGTCCTG ACAGTAGTTT GCAAACCCAGC AGCTAGCAGT TTGTCCAGCC      180
TCTAACATTG TCCAGCACTT TCCAGAGCAA ACTCACTGTT TACAAGAACT CTTGGCCTTA      240
CGAAGTTTAT AACCTCAAGC TTTGTTTATT TAAAATATTC CTGCAAAAGA AAAGTACCG      300
GCCCATGACC ATTCGTGACA GGCCCTTTGA ACGGACGATT ACCATGCATA AGGATAGCAC      360
TGGACATGTT GGTTTTATCT TAAAAATGG AAAAATAACA TCCATAGTGA AAGATAGCTC      420

```

TGCAGCCAC	AATGGTCTTC	TCACGGAACA	TAACATCTGT	GAAATCAATG	GACAGAATGT	480
CATTGGATTG	AAGGACTCTC	AAATTGCAGA	CATACTGTCA	ACATCTGGGA	CTGTAGTTAC	540
TATTACAATC	ATGCCTGCTT	TTATCTTTGA	ACATATTATT	AAGCGGTGGC	ACTCGAG	597

## (2) INFORMATION FOR SEQ ID NO:959:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

GAATTCGGCC	TTCATGGCCT	AGTGTCTTCT	TGTCAACTTC	ATTCTCTTCT	CTTGTTTTCT	60
ACGTCTGAGA	TCTTCTGAA	CACATTTTTC	TAGAGGCTGC	TGTCTCCTGC	TGTCTGGAGA	120
ATGATCTTTA	GAGGGAACGG	AAGCTTTTCT	CCTGTGCGTG	TGTGTCTTCC	TGTGTCCTAG	180
CACTTGGGGG	TGGAGAGTCT	CGGGGCGGGG	ACACCAAGTGT	CATCAGCGCC	TCTGCTGTCTG	240
TGCTTCTCTT	TTGCATGTTT	GGAAAGCCTC	AAGCGGGGAG	CGGACTCGAG		290

## (2) INFORMATION FOR SEQ ID NO:960:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

GAATTCGGCC	TTCATGGCCT	AGTGAGTGAG	TAAGACAGGT	TGCTCTTTGG	AAAACAAGGA	60
AAATCCCTTT	ATTAGAACAA	GGCATGAAAT	TCTGCCACTA	GGTGGCGATG	CCCTATAACT	120
TTACAACCTA	GTGTACATCA	CACGAGCACT	ATGGAAGATT	TCTCCATTCT	GCGCCCCACC	180
AACTCCCTCC	CCTCCTTCAT	TTTCAGGAT	GACAACACCT	TAGAGGTTTA	TGGCCATCAG	240
GAGAATTTAC	TACTAAGCTA	TATACTGATG	TAATGAAATC	TAATATATGT	TGTGCTCGAG	300

## (2) INFORMATION FOR SEQ ID NO:961:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 503 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

GAATTCGGCC	TTCATGGCCT	ATTTTCCCTT	CAGGATTGTG	TGTTGGGGTG	GGGGCATACT	60
GGGGATGACA	GAGGGAGAAA	GAAAGATTTT	TATTTTTCCT	TCTAATAAAT	GTTCAATTGAG	120
AAAGTTATAG	AATATGGAGA	AAATGAAATT	TATAACTCTC	CTGCGCAGAA	ATACTGTTAG	180
CTGTGAGTTT	CTTTTCTATA	TATGCTTATA	TAGTTGAGAT	TATGCATGTA	TACAGTTCTG	240
CATCTTAGCT	TTAAAAATAA	TGTCACATCT	TGATAATTTC	CCAGTCATTA	AAATTATTTG	300
AAGATATCAT	TGATGTATCA	CCTTATTTTA	TATTCTATTT	GAATAATACA	TCCAAGGTCA	360
CCAAAAGATG	ACAGTGAAAT	GTATTGTTTG	TAATCTACAT	TAGCATCAGT	AAATATGGAC	420

CATTTAAATT    TTAAGTC AACCTCTCTG ATCTTATTTT ATTAAATT AGGATAGGCA    480  
CTACATTGGA TGGGACTCTC GAG    503

## (2) INFORMATION FOR SEQ ID NO:962:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC TTCATGGCCT AAGCAGCTGC TGCCTGCCAG AGAGGCGCCT TCAGAGACCC    60  
AGCGCTTACA CAATACCCAC CATGTCCCAG GCTGGTGCTC AGGAAGCCCC TATCAAGAAG    120  
AAGCGCCCCC CTGTGAAGGA GGAGGACCTG AAGGGGGCCC GAGGAAACCT GACCAAGAAC    180  
CAGGAAATCA AGTCCAAGAC CTACCAGGTC ATGCGAGAGT GTGAGCAAGC TGGCTCGGCC    240  
GCCCCGTCGG TGTTCAGCCG CACCCGCACA GGTACCGAGA CTGTCTTTGA GAAGCCCAAA    300  
GCCGGACCCA CCAAGAGTGT CTTCGGCTGA GAAGTGTGCG CCACTCCCCT TGCTGCCCGA    360  
ATGCTCGGAA ACAGGAGCCT TACCCAGGCT CGAG    394

## (2) INFORMATION FOR SEQ ID NO:963:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 497 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC TTCATGGCCT ACCCTTCATG GCCTAGGAAA CTCACAAAAT GAAATATCCT    60  
TCTCAACGTC ACTAGAGAGT GGCAGAGTTT AGAGACAAAG CCATCTGATT TTGGAGCCTG    120  
TGCTCAGCTT TTAGCAGACA CACTGATTTC CAAGAATTGC TAGGATGTTT CTCAGTGCAG    180  
TTGACACAGG GACTCTCTGG AAAGCCTTCA GGACTGAACT TCCTCCAGAC AGTTTGGGAA    240  
ACACTGCATG TGTCTATTAT GAAGCCATCA GCTGAGCTCA TCCCCCGTGC ACTCCACAAC    300  
GCTGAGGCTC TGCACATGGC TCACCAAGTGC CAGGTGCTGC CAGTCAGCAG TGCCGTGCTG    360  
TTTCACAGC AGCCTGCATA CGTCTATATT GCCCAGCCTG TTTCACCTGG CGGGGTCACA    420  
CAAACCAACC CCTGGTATTG TTAGCACGTC CACATAATGG CATCTCCACA GCTGTGTCAT    480  
CCAAAAGAAA CCTCGAG    497

## (2) INFORMATION FOR SEQ ID NO:964:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 395 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GAATTCGGCC TACATCTTTT GATGACTCTG ATACCTTCAT TCATTTTTC AAGGAATTTA    60  
CTGATCATGA GGTGGAATAA TCTGTATTTC TCTTGCTTAT TATGTATTAA TAATCATAAA    120

TGTCTAGA	CACCAGAAGT	CACCAGAAGG	TCTGTCTCAG	TTATAAAGCC	180
ACTTTGTTC	ATTTTGTGTT	TCAGTGTTAC	AGTTTGAGAT	CTGTATATTT	240
ATGTGTTTTT	CATTGAAATA	ATGTACAAAG	ACTGATCTTG	ATGCTGTGTA	300
TTGTCTTAGG	CATTCTGAG	CTCAGCTTCA	GTTGGATGGT	GGGTCAGCAC	360
TGAACATACT	AGACTTCAGT	TTAAACTGC	TCGAG		395

## (2) INFORMATION FOR SEQ ID NO:965:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTCGGCC	TTCATGGCCT	ATAGTAAATG	CCCACTAGGC	ACCCTGGAGT	CATTTGTGTA	60
GAGTGGCATC	TCTATACAAC	TGTTTCTACTA	ACTGTCTGGAG	ACACCCCTAAT	CACCCAGCC	120
ACAAACAAAT	AGAACATTGT	ATGTGTGCTG	AATCCACAA	AGGCCAGACA	TGATGCCATG	180
AGACCAAGAA	GGAAAAGAAA	TAATGTGGAA	AGGGTTTGGG	GTGGAAAGGT	GGGGAACCTG	240
GAGGCGGGCC	ACATGGGGCC	CCAGAAGCCA	TGTTGAGGGT	TTTGTCTTCA	CCAAAGGATC	300
AGTGGGAGAT	TAGTGTAGAA	CATTAAACAG	AGGTGGGGTA	TGTGTCATAT	TTCCATTAAA	360
AAATTCATCC	TGGCCACAGT	GTAAGAATA	GATTAGGGAG	GAAGCCAATC	AGGAAGCAAT	420
TGGAGTAGGC	AATGCAAAAG	GCAAAGTGAA	CTTGACTAG	TGGTTCTCGA	G	471

## (2) INFORMATION FOR SEQ ID NO:966:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AAGCCAGCTC	AGNTGCNTCA	GAGATTTTGT	GTGTCCTTGC	60
ATACACAAC	TAATTTCTCT	AGGATTCAGT	CTCCTCGTNT	TATTTTAAA	ATNATTTTAT	120
TTGTAAATAC	CTCATCGTGG	ACTCCAAAAG	CATGTCCTCT	CGTTTTAAA	ACTGGCATAA	180
TACCTACCAC	AAAGGTGGAT	GTGAGAATTA	AATAGAGCTT	TATACAGAAT	TCCCTCAGGC	240
ATTTTAAAGT	TTATGTAATA	GGGATGTATC	TTACAGTTGA	TGGGTACATT	TAGTGTAAGT	300
CCCCTACCTC	CCAAGCTAAT	AATGGTGCGT	CGTACAATTG	ATGGTACCAA	ATTGAGGTGA	360
TAATAACATA	GAAAGAGTTT	AATGCAACGT	GAAGTACAAA	ATGCATTCAA	TAAGTAGCTG	420
CTATCATTTT	TTTAAAAATT	AAATATGGCT	GCTTGTTAAG	GCCATATCCC	AGGAGGAAAG	480
TGTGGTCTCT	GCTGGGAGGT	TGGTCTACAT	ACAGGAAGCC	AGATGTGTGA	GATGGCTCTA	540
GATAGGCAGA	AGGGGAGAGC	TCGTGCCCTC	TAGGAACCTA	TTAATAGATA	TCAAGGGAGG	600
GATAGCTCGA	G					611

## (2) INFORMATION FOR SEQ ID NO:967:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC TTCATGGCCT AATTTAAGTT TTTCTAGCAG ATCGCTCAGG TTGCTCTTAA	60
CTGGAATGTA GTGTTTCCAG GGCTGCAGCT CATTGTAAAA ATGTTTCATAG TAGATGGAAT	120
CCTGCTTCAG CACAACACTG TCACCAACTA GCAAAATATGG CAGGCGATAA GCTGCTACAG	180
TGCCATCGAT ATTTATTTGA TACTTATGCT TGAAGAAATC AAAAAATGAA ATATGTTTCA	240
CAATGGGACC ATACAGGTTT TCATCGTGTT TAAAGAAGAA AAAGTTGGTG AAAGCAGCGT	300
CTATGAGTTC TGGGTGTTTT CTACTGAGTT TAACCAGCTC GAG	343

## (2) INFORMATION FOR SEQ ID NO:968:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 593 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC TTCATCGCCT AGCCAGGANC TTTCTCGGAC GCCTTGCCCA GCGGGCCGCC	60
CGACCCCCTG CACCATGGAC CCCGCTCGCC CCCTGGGGCT GTCGATTCTG CTGCTTTCCT	120
GACGGAGGCT GCACTGGGCG ATGCTGCTCA GGAGCCAACA GGAAATAACG CGGAGATCTG	180
TCTCCTGCCC CTAGACTACG GACCCTGCCG GGCCCTACTT CTCCGTTACT ACTACGACAG	240
GTACACGCAG AGCTGCCGCC AGTTCCTGTA CGGGGGCTGC GAGGGCAACG CCAACAATTT	300
CTACACCTGG GAGGCTTGCG ACGATGCTTG CTGGAGGATA GAAAAAGTTC CCAAAGTTTG	360
CCGGCTGCAA GTGAGTGTGG ACGACCAGTG TGAGGGGTCC ACAGAAAAGT ATTTCTTTAA	420
TCTAAGTTCC ATGACATGTG AAAAATCTTT TTCCGGTGGG TGTCACCGGA ACCGGATTGA	480
GAACAGGTTT CCAGATGAAG CTACTTGATG GGGCTTCTGC GCACCAAAGA AATTCATC	540
ATTTTGCTAC AGTCCAAAAG ATGAGGGACT GTGCTCTGCC AATCCGACTC GAG	593

## (2) INFORMATION FOR SEQ ID NO:969:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

GAATTCGGCC TTCAAGGCCT AGTTTGTTG TTTTCGTTG GTTAAAGCTT ATTGCCATGC	60
TGGTGCGGCT ATGGAGACTG TCTGGAAGGC TTGGAATGGT TTATTGCTTA TGGTAAAATT	120
TGCCTGATTT CTTACAGGCA GCGTTTGGAA ACCTTTTATT ATATAGTTGT TTACATACTT	180
ATAAGTCTAT CATTTAAAGA CATGTAAGTA AACAAATGTA TTTGTTTCAT AAGCATCTTC	240
CTGTAATCTA TTATAAAATT GAAATTAAAT ATAGAGAATG TTTTAACAAT TTTTAACTC	300
AAAATTTGTC AATCATTTTT AATAGTTCTT TTTTATAAAA AAGAAAAAGG AATTTAAGGA	360
CAGGCAGTAG TCTCTTTTAA AATTTATTCA CAAAACCCAT TAACTCGAG	409

## (2) INFORMATION FOR SEQ ID NO:970:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

GAATTCGGCC	TTCATGGCCT	AAGATTATAT	AAGATTATGC	CAATAAACT	CATGCCTGAG	60
GAAGTGGTG	CTCCCTTTCT	ATGGGTCAGT	ATTGGTGCAA	GAAGTGGAAA	CCAGCCCTTG	120
GAGAATAGTT	ATACATTGGC	CATGATTTTC	CACAGCCCTG	GAAATGCACA	ATTCTATCCT	180
CCTACCAGGA	TGATTGTTAA	GTTTATAGCTA	ACATTTGATT	ATAAAAGGCC	GTAAGTATGA	240
GTATCTCTGA	GATAATTTGT	GTATTGGAAA	GAGGTGTGTA	ATAGCACTTT	TTTAAAAAAA	300
CCTAGGTGTG	AAGGAATTAC	AAGTCCAGAA	GGCTCAAAAT	CTATAGTGA	AGGAATCATA	360
GAGGAAGCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 656 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

GTGGAAGTCC	TGACCTCAGG	TGATCCGCCC	ACCTTGGCCT	CCCAAAGTGC	TGGGATTACA	60
GGCGTGAGCC	ACCACGCCCG	GCCTATCTCT	TGTTTTTAAA	TCAGTCTAGG	GTGCCAAAGC	120
ATCAGGGTTC	CCGGCCTGCA	AGAAAGGGAG	ATTCTGTTC	ATGTTAAAGT	GTCATATTTA	180
TGAAAGTCC	CTTTTGGAA	TCTTTGAGGT	TGTCGTACT	ATAGGACTGG	GGAAATGCAA	240
GTGAGTCTAA	GAAGAAACCC	AGATGTGTCC	TACCCTGGCT	GGCAGTAGTG	AGAAGGGAGG	300
AAGTTCTTCC	TTGGACACTA	GTACTATTGG	AAAGTTCCTT	ATGTCTGGTT	CACTGATGAA	360
GCTTGAGGAT	AGAATTGGTG	AGGAGGGAGG	GGAGAACAGG	TCACAGCTGG	AGGGGAGCCT	420
GGGCCCTATA	GGGTGTGAGG	CAGAGCAGAG	TGGCAGATAG	GACATGTGGA	CGGTGGGGAA	480
AATATTCCTC	ATGGGACAGA	AGATACCTGG	CACATGTACC	CACAACCTGT	ACACAGATGA	540
TCTGTACTGG	ACACACGTGG	AGATATGGCC	ATGCCACGCA	TGTGCAAACA	GAGGTGTACA	600
CACAGGAGTG	CAGTGATACA	GGACACAGAT	AAACAGAATG	TACACAGCTT	CTCGAG	656

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 318 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

GCAGGAATAG	AGTTGGAGCG	GTGCCAGCAG	CAGGCGAACG	AGGTGACGGA	AATTATGCGT	60
AACAACTTCG	GCAAGGTCCT	GGAGCGTGGT	GTGAAGCTGG	CCGAAGTCA	GCAGCGTTCA	120
GACCAACTCC	TGGATATGAG	CTCAACCTTC	AACAAGACTA	CACAGAACCT	GGCCAGAGAG	180
AAGTGCTGGG	AGAACATCCG	TTACCGGATC	TGCGTGGGGC	TGGTGGTGGT	TGGTGTCTTG	240
CTCATCATCC	TGATTGTGCT	GCTGGTGCCT	TTTCTCCCTC	AGAGCAGTGA	CAGCAGTAGT	300
GCCCCACGGG	TCCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GGAAAAATAC AAAAATTAGC CGGGTGTGGC GACGTGCGCC TGTAGTCCCG GCTATTCAGG	60
AGACTGAGGC AGGAGAATCG TTTGAACCTG GGAGGTGGTG GTTGCACTGA GCCAAGATTG	120
CGCCATTGCA CTCCAGCCTG GGCAACAGGG TGAGANTCTG TCTCCAAAAA AAAAAAAAAA	180
AAAAGCTGGA TTACAGGCGT GAACCACCGC ACCCAGCCAA TTCATAGGTG TTTTAAGTGT	240
GACACTTGGA TGGTTTAAGT CTGATAGAAC TTTTACATT ATTATACATT TAAATATATA	300
CCAGGGGCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 372 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC TTCATGGCNT ATTCTTCGCA GATTATGAAG ACTACATTAA ATGCCAGGAG	60
AAAGTCAGCG CCTTGTACAA GAACCAAGA GAGTGGACGC GGATGGTGAT CCGGAACATA	120
GCCACCTCTG GCAAGTTCTC CAGTGACCGC ACCATTGCCC AGTATGCCC GGAGATNTGG	180
GGTGTGGAGC CTTCCCGCCA GCGCTGCCA GCGCCGATG AGGCCATCTG AGCCTCCAGA	240
CCAGACCCCA AACCAGCCCT TGAGTCTGTC ACACTCTCTT GGGCCAGCCC CAGCACCTCA	300
TGCAGAGGGT GGGGTACTGG AGTTAGATCT CTAAGCCCCT CCTGGAACCC TCATTTTCCC	360
CACGTGCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 449 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC TTCATGGCCT AAAGGATTG ATTGAGAGTG ACATAGCTGC TCTCCATCAC	60
TTTTACTCCA AGCATCTCGA ATTCCCTGAC AATGATAGCC TCGTAGTACT CTTTGCACAG	120
GTAACTGTA ATGGCTTCAC AATTGAAGAT GAAGAACTTT CTCATTTGGG ATCAGCGATA	180
TTTCCTGATG TTGCATTGAT GAATCATAGC TGTTGCCCCA ATGTGATTGT GACCTACAAA	240
GGGACCTTGG CAGAAGTCAG AGCTGTACAG GAAATCAAGC CGGGAGAGGA GGTTTTTACC	300
AGCTATATTG ATCTCCTGTA CCCAACGGAA GATAGAAATG ACCGGTTAAG AGATTCTTAT	360
TTCTTTTACC 3TGAGTGCCA GGAGTGTAAC ACCAAGGACA AGGATAAGGC CAAGGTGGAA	420
ATCCGGAAGC TCAGCGATCC CCGCTCGAG	449

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

```
GAATTCGGCC TTCATGGCCT ATAGTGTCTT CCTNGGCGCT GCGACAGCCA ATGTAATGGC    60
CTTCTGTTT CTCATAAGCA GTTTTGTACA GATAATCACT GGCAATATCC CTGGAAGCCT    120
TGGCATGCTG GATCCCAATG GCATCAAACG CGAG                                154
```

(2) INFORMATION FOR SEQ ID NO:977:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 485 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```
GAATTCGGCC TTCATGGCCT AGAAGAAATC TCTCTTCCAT TCCTGAAAAC AATTTTAGTC    60
CATTCTCTT CATTAACTTA AGTATAAAAC TACTAATATC TTTCAAGTGC CAGAAGTTCC    120
TCAAGAAGCC GCAGAAAAAG AAATTCCCGT GGCTCCACCC AAAAAACCAG AAGCTCCGAT    180
TGTCCCAAGT ACACTTTAGC CCTGACTTCA TTCTGCAGAA GAGATATCTC CTCTCCTACT    240
GTAAACAATT TTAGCCCAT TCTCTTCATT AACTTAAGTC TAAAACTACT AATATCTTTC    300
AAGTGCTGA AGCTCAAGAA GTTGTCCAG AAAAGAAAGT TCCTAAGGCT CCTCCCACAA    360
AACCAGAAGC CCCACCTGCC ACAGGTATTT TTTACCCCTG TCCTTTTCT GCAGAAGAAA    420
TATCTCTTCT GATCTTAGAA ATATTTTACT CCATTTGTCT CATTAACTTA AGTGAAAAAC    480
TCGAG                                485
```

(2) INFORMATION FOR SEQ ID NO:978:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 322 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```
GAATTCGGCC TTCATGGCCT AGAAAGATTC CTACGTGGGC GACGAGGCTC AGAGCAAGAG    60
AGGTATCTG ACCCTGAAGT ACCCTATCGA GCACGGCATC ATCACCAACT GGGATGACAT    120
GGAGAAGATC TGGCACCACA CCTTCTACAA CGAGCTTCGC GTGGCTCCCG AGGAGACCCC    180
CACCTGCTC ACCGAGGCC CCCTCAATCC CAAGGCCAAC CGCGAGAAGA TGACCCACCA    240
ATCACCTAGG CCATGAAGGC CGAATTCGGC CTTTCATGGC TAGCGCGACC GCGAGGGAG    300
GAAGAAGCGC GAAAAGCTCG AG                                322
```

(2) INFORMATION FOR SEQ ID NO:979:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 499 base pairs
  - (B) TYPE: nucleic acid

STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

GAATTCGGCC	TTCATGGCCT	AGCCGCATCT	TCTTTTGGCT	CGCCAGCCGA	GCCACATCGC	60
TCAGACACCA	TGGGGAAGGT	GAAGGTCGGA	GTCAACGGAT	TTGGTCGTAT	TGGGCGCCTG	120
GTCACCAGGG	CTGCTTTTAA	CTCTGGTAAA	GTGGATATTG	TTGCCATCAA	TGACCCCTTC	180
ATTGACCTCA	ACTACATGGT	TTACATGTTC	CAATATGATT	CCACCCATGG	CAAATTCCAT	240
GGCACCCTCA	AGGCTGAGAA	CGGGAAGCTT	GTCATCAATG	GAAATCCCAT	CACCATCTTC	300
CAGGAGCGAG	ATCCCTCCAA	AATCAAGTGG	GGCGATGCTG	GCGCTGAGTA	CGTCGTGGAG	360
TCCACTGGCG	TCTTCACCAC	CATGGAGAAG	GCTGGGGCTC	ATTGTCAGGG	GGGAGCCAAA	420
AGGGTCATCA	TCTCTGCCCC	CTCTGCTGAT	GCCCCCATGT	TCGTCATGGG	TGTGAACCAT	480
GAGAAGTATG	ACAACAGCG					499

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 333 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	ACTTGCCTCC	60
TTTGCTGTTT	TAGGAACAAT	TCCATGGGAG	GGTCTATTCT	GGATTAGGAA	TTCTTTCTTG	120
AGTAATTTTT	ATTACCTTTT	AATTGTGTCC	ATTTCTTTGG	GAAATAGCAA	GCTCTCCCTG	180
CTCCCGCCAA	TCTCTCCTCT	TACTTTTGGG	ACCAGTTCTT	GTACCTCTTA	GCTCACCTCA	240
TTCAGTGAAA	ATTGACAAAA	GAGACGTGAG	TTTCTGTACC	TGTGAGACAG	CTTATTTTTC	300
TGTCTTTATG	GTTTCTAAGC	CAAAAATCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 91 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGCC	TTCATGGCCT	ATCGAGTAAT	CCTGATGTTT	TCACTTTCTC	TAATCACTTC	60
TTCTATTTT	TGTCCAGTGG	CTTTTCTCGA	G			91

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 351 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

GGCGGCTCGT	GGCTGCGTTC	CCGCTGATGC	TTGTGCCTGC	AGAGCCTCTC	CAGGCTGCTG	60
GTGGGGGAGC	ACTCCCTTCC	CCGAGGTCTG	GACGCTGATC	TCCTTTTCTT	CTTCTTCCTA	120
CTCTCATAGT	GCTCATAGGA	AGAGCTGCCA	GGGCTCCCCG	ACCGCGACCG	GGACGTCTC	180
CGGCTGTGGC	CCCAGGGGCC	CCGCCTGTGC	TCCCTGCTCT	TGTCCTTGGC	TTTCTTCCTC	240
TTAGCTCGCT	CTCGGCTGCT	GGAGCGGTCA	CTGGAGGACC	GCCGGCTCTT	GGCCTTGGAC	300
CGCTGCCTCC	TGGGGCGCTC	CTCACCCACT	GATGGTGACG	CCGACCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GAATTCGGCC	TTCATGGCCT	ACACAAATAT	TGCTGTTCCA	TGTTCTCCAC	TTTCATTTTC	60
CACTACAAAT	GAAAAGCAAT	TTTTGAGACT	GAATCTGTTG	CTATTTTAAA	GGTTATGTG	120
GGAAACTGAG	CTAAAGGAGT	TAGCATCTTT	ATTTTTGTAT	CAAAAATAAA	GGTTATTTTG	180
AAATTATTAG	GATTTTACAA	CAATTCTGAA	ATCTGTTGCT	TTTGTAACA	AATTGTTTGA	240
TCTTAGTGAT	CCCCCTACTA	CTACCACCAA	TCACTTCAC	AAAGTCAGTT	ATGAGTCTAC	300
CAGACTTTGT	TCTGAAAAAT	AGAAACAAAA	CACCTGATTA	AGCTCTTGAG	TATGGCATAG	360
GAATTTTTTA	GAAGAAATGCA	TTCAAGGATT	CTTTTCCTTT	CCTTCAGTGT	CATTAATGTT	420
AAAAGAGCAG	CAACTGTTTT	GTTGAAACAA	ACAGCTTAAC	TTCAGAAATA	AGAACTAGCA	480
CACTCGAG						488

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC	TTCATGGCCT	ACCTCCTGGC	TCAGCAGGCT	CCCTCCTTTT	ACCAAGACTG	60
CTGGGACGTT	GAATCCCGGT	GTCTGATCAT	CTCACCTACT	CTCCTCCTAA	CTCCCAACTG	120
AAATCCATCT	CCTCTCTTCC	TCCCCAACAT	CCATCTCTTT	CCCAACATGC	CTTTCACCT	180
AGAGCAGGTG	AAGAAAGCCC	ATGACTAAAA	CTAAAGACTC	AGAATGAAAC	AAAAGGTGTG	240
ACAAGTTATT	TGTGGGGAAG	GTTTTAGAT	ATGTTCCAAG	AGAAAATAAG	GTAAAACAAC	300
CTTGTTTCATC	AGACCAACAG	TGCTGGAAG	GGCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

```

GAATTCGGCC TTCATGGCCT ACCTGAATTG GGTGGCGAGT TCCCTGTGCA GGACCTGAAG      60
ACTGGTGAGG GTGGNTTGCT GACAGTGACC CTGGAAGGGA TCAACCTCAA ATTCATGCAC      120
AATCAGTGTT ACCTTTTATC TCTCAGTGGA CATTCTTAA GCTAATTCCT TTCTGAGGCC      180
AGCGCATCAT CCCAGGAGCG GAAGGTTTTC ATAGAGCTGA ATCACATTAA AAAGTGCAAT      240
ACAGTTCGAG GCGTCTTTNG TCCTGGAGGA ATTTGGTAAT TACACTATTT TGCTCTTAGG      300
TCTGGACTCA CATGGCAGTA ACTCAAACCT CGGAGCTCCA GAGGAGGGTC TAGGGGCAGG      360
GAGAAAGAAGA ACCTCTGTAG AGAAGTCTGG AGGAGCAGGA GTGACAAGGA AGAAAAGGGA      420
CCCCTGAGAT GAGAGCCGGG ATGTGGAAGG GAAAGATAGA TAATGGATCG CAGAAGAGCA      480
AATGGGGCCT CNGGTGGTAC TCGAG                                           505

```

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

```

GAATTCGGCC TTCATGGCCT ACACCTTCAC ACCTGTCCTT ACCTCCATTC TCACTTCCAC      60
TGTCTTCACT AACTCCACCA TCATCACTTC AATCTTCCCT TCCATTCTCA CTCTCTTCTC      120
ACTCACTGTC CCTCTTTCAC CTCCATCCTC ATCTCTGTCC TCCCGTCTAT TCTCCTCTCC      180
AACCTCACTT CTGTCTCTCC CTTCCTCCTG CTCTCCATCC TCACCTCCAT CCTCACCTTC      240
AACCTCACCT TTATCTCAC CTTCAACCTC ACCTTTATCC TCACCACTCG AG                292

```

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

```

CTCGAGTATC CACTTGCTC GGCCTCCAA GGTGCTGGGA TTACAAGCAT GAGCCACCAT      60
GCACGGCTGT AGATGTAAAT TTTGAAAGA GGAAGGCATC AAATTAGGGG TGGGGGGATG      120
GAGGTACATC CAGCTTAGCC TTCAGACCTT AATGGAATG CTTTCTAAAC TAGCGATCCC      180
AGAGCAGTTG ACTCTCCTGA AATAAACAG GATCTGAGTA GGCCATGAAG GCCGAATTC      239

```

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GGCAGACTGC AATACCTGCG TGGAAATAGA AGACAGAAAG GTTCAAGAC AACAGATGAA	60
TTGTGAAAGA GAGCAGCTAA GGGGTAATCA GGAAGCAGCC GCTGCCCCTG ACACAATGGC	120
TCAGCCTTAC GCTTCGGCCC AGTTTGCTCC CCCGCAGAAC GGTATCCCCG CGGAATACAC	180
GGCCCCCTCAT CCCACCCCG CGCCAGAGTA CACAGGCCAG ACCACGGTTC CCGAGCACAC	240
ATTAAACCTG TACCCTCCCG CCCAGACGCA CTCCGAGCAG AGCCCCGGCG ACACGAGCGC	300
TCAGACCGTC TCTGGCACCG CCACACAGAC AGATGACGCA GCACCGACGG ATGGCCAGCC	360
CCAGACACAA CTTCTGAAA ACACGGGGCT CGAG	394

## (2) INFORMATION FOR SEQ ID NO:989:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

GAATTCGGCC TTCATGGCCT ACTTCCGGGC TTTGACTCAA TTCATGGGAA ACAGGAAAAG	60
CAAACTAGT TGATCTTGCT ACTAAGGCGG ACTGAAGTTT CTTGTCTTCA TTGTAAACA	120
ACTTCCAAAT CACTTTGACT CTTTGACCAT ATTCTGTCT ATTTCCCAT AAAGCATCAC	180
AAAATAATGA AGGAATTCTT AGGAAGAGCC TCAAGATGCC CATGTGGCGT CTGTGTGGGC	240
TGCCTCGTCT GGTAGTTCAG GGACCCACTG GGCCATTTGA AGGGCAAAGA GAAAGCCCCA	300
GGTCTCATGG CAGGAGACAA GACTTCCACA GTGTGAGCC AGTAAGGAAC AGGGCACGTA	360
CTCGAG	366

## (2) INFORMATION FOR SEQ ID NO:990:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

GAATTCGGCC TTCATGGCCT ACATGTTTAT TATGAAGTTA TTAGTAATAC TTTTGTTC	60
TGGACTTATA ACTGGTTTGA GAAGTGACTC TTCCTCTAGT TTGCCACCTA AGTTACTACT	120
AGTATCCTTT GATGGCTTCA GAGCTGATTA TCTGAAGAAC TATGAATTTT CTCATCTCCA	180
GAATTTTATC AAAGAAGGTG TTTTGGTAGA GCATGTTAAA AATGTTTTTA TCACAAAAAC	240
ATTTCAAAC CACTACAGTA TTGTGACAGG CTTGTATGAA GAAAGCCATG GCATTGTGGC	300
TAATTCCATG TATGATGCAG TCACAAAGAA AACTTTTCT GACTCTAATG ACAAGGAGCT	360
CGAG	364

## (2) INFORMATION FOR SEQ ID NO:991:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC TTCATGGCGG GGAAGAAGAC AAGAAAATTA ATGAAGAAGT GGAGTCTCAA      60
TATCAGCAAA GTATGGACAG TAAATTATCA GGAAGATATC GGCGACATTG TGGACTTGGC      120
TTCAGTGAGG TAGAATACCA TGATGGAGAA GGTGATGTGG CTGGAGATGA TGATGATGAC      180
GATGATGATT CACCTGATCC TGAAAGTCCA GATGATTCTG AAAGCGATTG AGAGTCAGAG      240
AAAGAAGAAT CTGCTGAAGA ACTCCAAGCT GCTGAGCACC CTGATGAAGT GGAGGTCTCG      300
AG                                                                                   360

```

## (2) INFORMATION FOR SEQ ID NO:992:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT AGGTGCAGCA GGTCTCTGG GAAGTGTCGC ACAAAGGAGT      60
CGCCCACTGG AAGGTTCTGG GCAGGCGAGA TGCCAGAGG TGATCCCTGC CCGCCCTCC      120
CACCTCCCTT CCCACACAGC CCATGGAGGT GTTGTGGAC GACGAGACCA AGCTCACGCT      180
GCACGGCCTG CAGCAGTACT ACGTCAAAC CAAAGACAGT GAGAAGAACC GCAAGCTCTT      240
TGATCTCTTG GATGTGCTGG AGTTTAACCA GGTGATAATC TTCGTCAAGT CAGTGCAGCG      300
CTGCATGGCC CTGGCCAGC TCCTCGTGA GCAGAACTC CCGGCCATCG CCATCCACCG      360
GGGCATGGCC CAGGAGGAGC GGTGAGTNCG AACCGCCCGC CAAGGCTGCA GGGNGCACCA      420
CCAGGAGCCC AGTGTCTGAC GGCCTCCACT TGTTCCTCT GCACCCCNCC CCATCACGCT      480
CGAG                                                                                   484

```

## (2) INFORMATION FOR SEQ ID NO:993:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AAAGGAATTT ATCTATTTAA TCATTGAATG TATTGAACAT      60
TCATTTGTTT ATAATTTTGT TTTGTTATTG AAAATGTCTG TAAGATTTAT AGTGATGTTT      120
CCTTTTCTAT TCCTGACATT GTTAATTTGT GTTCTCTCTC CCTCCATCCC TCTCTCACAT      180
CTCGAG                                                                                   186

```

## (2) INFORMATION FOR SEQ ID NO:994:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

```

GAATTCGGCC TTCATGGCCT AGTGTTTCA TAAAGGGGTT GAGGCCACCA GTACTGCAGC      60
GAATTCCTT TTCTTCTCCC TCCTCCTTCC TTCTCTGAGC TTGCTTTTAG GGAAGGTTAA      120
TCTTACAGGC TACCTATGTT TCTCTCCACC TTACTAAAAT CTAAATAATG ATAGAAATTT      180
TAAGTTTTTA AATTGAGTAG TTCTGAGTAA TCCTAGAATA TTTTCCAAA TTAAATAATC      240
CTTTATTATT TGCAAGTTGG GCCAAATTTT TTTTTTTTG GAGACGGACT CTTAACAATC      300
TAAGATTGTT TCAACAGGAC TTTCTTATTC CCATTCCCTC GAG                          343

```

## (2) INFORMATION FOR SEQ ID NO:995:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

```

ATCTTTAACA GAATTATTAT TATTTAATAT AGAAGCACAA GCAGGGGAAA AATACGTCAT      60
CAAAATTTTC AAGTAGTCAA CTCATTATTG GAGCCATTTT ATTTTATAAT TTTATTATC      120
AGCTGGTTCA GAATCAAAA GGGCATGTAA TGAAGTCGCT ATCCTGCTTC TGTTTCCAG      180
CTATCCAGCT TCCCTCCCTG GAGGCAAACA GTGTCATTGG TTTTCAATAT ATCCTTCCAG      240
ATGTATGTTA TCCGTAATC TCGAG                          265

```

## (2) INFORMATION FOR SEQ ID NO:996:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

```

GATTCGGCTT CATGGCCTAC AGCAGACACC CTCCTGCCCA CACCTACTTG TCCGCGCGGT      60
CTGAGGTTTG CTTGAG                          77

```

## (2) INFORMATION FOR SEQ ID NO:997:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

```

GAATTCGGCT TCATGTCGCT CTTCTGCAG GTCAACATGT ACAGCAGCGT CTTCTTCCTC      60
ACCTGGATGA GCTTCGACCG CTACATCGCC CTGGCCAGGG CCATGCGCTG CAGCCTGTTC      120
CGCACCAAGC ACCACGCCCG GCTGAGCTGT GGCCTCATCT GGATGGCATC CGTGTGAGCC      180
ACGCTGGTGC CCTTACCCGC CGTGACCTG CAGCACACCG ACGAGGCCTG CTTCTGTTTC      240
GCGGATGTCC GGGAGGTGCA GTGGCTCGAG                          270

```

## (2) INFORMATION FOR SEQ ID NO:998:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCTAGA CCTGCCCCCA GGCCACAGTC ACACCCCCCA GGAAGGAAGA GAGAATGGAT	60
TCTGCAAGAC CATGTCTACA CAGACAACAC CATCTTCTGA ATGACAGAGG ATCAGAAGAG	120
CCACCTGGCA GCAAAGGTTT TGTCACCTCTA AGTGATCTTC CAGGGTTTTT AGGTGATCTG	180
GCCTCTGAAG AAGATAGTAT TGA AAAAGAT AAAGAAGAAG CTGCAATATC TAGAGAACTT	240
TCTGAGATCA CTCACAAACT CGAG	264

## (2) INFORMATION FOR SEQ ID NO:999:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCT TCATGGCCTA GGCGATTGTA ACTGCCTATG AGAATAGCTC TCAGCATGAT	60
CCCAGTTCAA ATAACGCTAT GCTTGGGGTT CATGCATCAG CTTGAGCGAT CATCCAGTAT	120
GGAAAAATCG CCCGGAACA AGGACTGGTC AATGTAGCTC TGGATATATT AAGTCGGATT	180
CATACTATTC CAACTGTTCC TATCGTGGAT TGCTCCAGA AGATTCGACA GCGTACTCGA	240
G	241

## (2) INFORMATION FOR SEQ ID NO:1000:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 295 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC TTCATGGCCT AGAATTGAAT TTAGACTTTA CAGAGTTACT GGTGTGTA	60
TCTTTGAGTT GTTTAAATTT TAATGTTAGA GTTTTACTGT TTGATCAGCA CATTTTTTTT	120
CTCTTTTGTC TATAGGCCCG AAATGTTTGA GACGGCGATT AAGGAGAGCA CCTCCTCTAA	180
GAGCCCTCCC AGAAAAATAA ATTCATCACC CAATGTTAAT ACTACTGCAT CAGGTGTGTA	240
AGACCTTAAC ATCATTGAGG TGACAATTCC AGATGATGAT AATGAAACAC TCGAG	295

## (2) INFORMATION FOR SEQ ID NO:1001:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 248 base pairs
  - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCGGCC TTCATGGCCT AGATATTTAG AAATTTGTG TATTATATGG AAAAAGAAAA	60
AAAGCTTAAG TCTGTAGTCT TTATGATCCT AAAAGGAAAA ATTGCCTTGG TAACTTTCAG	120
ATTCCTGTGG AATTGTGAAT TCATACTAAG CTTTCTGTGC AGTCTCACCA TTGCATCAC	180
TGAGGATGAA ACTGACTTTT GTCTTTTGA GAAAAAAAC TGTACTGCTT GTTCAAGAGG	240
AGCTCGAG	248

(2) INFORMATION FOR SEQ ID NO:1002:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 331 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

GAATTCGGCC TTCATGGAGT CAGCCTTCCA GTCCTCATCT CAGAAATTGA CTAGCCAGAA	60
GGAACAGAAA AACTTAGAGT CTTCAACAGG CTTTCAGATT CCATCTCAGG AGTTAGCTAG	120
CCAGATAGAT CCTCAGAAAG ACATAGAGCC TAGAACAACG TATCAGATTG AGAACTTTGC	180
ACAAGCGTTT GGTTCCTCAGT TTAAGTCGGG CAGCAGGGTG CCAATGACCT TTATCACTAA	240
CTCTAATGGA GAAGTGGACC ATAGAGTAAG GACTTCAGTG TCAGATTCTC CAGGGTATAC	300
AAATATGATG TCTGATGTAA GTGAGCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1003:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 248 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

GAATTCGGCC TTCATGGCCT ACAGTATTGG ACTTTCAGAA GCTGAACAGA TGATGGGTGA	60
GCAAACCTGGT TTAGCAGACC CAAGAGAGCT GAATCCTAAG CCAGCAAATA GAGAAATCCA	120
AGATTCAGCC CAAATTATGC TTTAGAATTC CTCAAAGGCT CAGAACTGG CTGCACTAGT	180
TCCCCCGACA GGAAGCATGG ATTGAGGAGG TACCAAACCC ACTCCCCACC AAAAACCCAA	240
AACTCGAG	248

(2) INFORMATION FOR SEQ ID NO:1004:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 281 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```
GAATTCGGCC TTCATGNCCT GGNGAAGAGN AACAAAGAGAA CAAAAAANA ANAAGTCGAG      60
AGTCAGTAAT TTTCTTACTT AATATTGNGG GGATNTTACT TNATACATAA AGTTANTGAA      120
ACTAGAAATA GTGGTTAAT ATATTACTTN TAATTCAAAA ATTAACCTAT ATTTACAGAT      180
GCTCTACACA GTTCTTTGT GAATCCACCT ATGGTTTTAT TTTNATTAAT TTTTNTTNC      240
ANAGCNATGA AATGTTGCTT TGTGGNGCCA GCGCACTCGA G                        281
```

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```
GAATTCGGCC TTCATGGCCT ACATAAACCA TCACATTTAA TCTGGCAGCT GCCCTGTTTT      60
TGAGGTTTTC TTTGTATTTA TCTTCTTTG GTAAATGAAA GCTCTCATCT TTGTTTACAG      120
GCCAGAAAAA CTGAAAAAGA CACAGGCTCT TCCACTTACT GGATGTTTGA CAAAATGATA      180
TTTTGGGGCC AAAACATTGG CATTACTGGT AAACCTGGTA GAGATTCACT AACTCAGACT      240
TTATTTCAGA TCTCTGAAA AAATAATCTG CATTAACATG ATGACTCGAG                290
```

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```
GAATTCGGCC TTCATGGCCT AAATTTTCAC ATATATGTAT ACTTAATTTT CAGCAATTAT      60
GACACAATAA AAAGAATATG CAAATTTATT GTTGTTCAG AAGGTTTTC AGGACTGGGA      120
ACGCTTTAGT GTCATCAACA GTAAACCTCA GATACTGTTT TGCACAGTTC AGAAGTACCA      180
TACCAGGTAT TGTGAGTGGC AAGAACGCCA GGGGACAGAG ATGCTTCTGG TAGATGAGGG      240
CCAGAGAAAC CAGCTCTCCT CCATTTTGAC AGCAATTTCT CACTGTGGCC ATTTGGCCTC      300
CATTATGTTT TGAGAGGAAC GCTCGAG                                327
```

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

```
GAATTCGGCC TTCATGGCCT AAAAAAAT ATAGTGTTTT ATGCCACAGA GAATCAAGTT      60
```

GCATTGT	ACTAAATGG	TCAAGCATTT	TCAAGAACAT	GA	AAATAA	AAACATACAA	120
ATTTATATCT	CAAAGGAAA	GTATCTTCTT	TCATGTCAGA	TCATCAGCAC	AGAAGCCCTC		180
GATGCATGCA	AAGGCAAGCA	CAGGCTCTGC	AGATGAGATG	TGAAGAAGCA	ATTAGGGAAA		240
TTCTCGAG							248

## (2) INFORMATION FOR SEQ ID NO:1008:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GAATTCGGCC	TTCATGCCTA	CATCAAACCC	TTTTCTTGTA	GCAGCACAGG	ATTCTGAGAC	60
AGATTATGTC	ACAACAGATA	ATTTAACAAA	GGTGACTGAG	GAAGTCGTGG	CAAACATGCC	120
TGAAGGCCTG	ACTCCAGATT	TAGTACAGGA	AGCATGTGAA	AGTGAATTGA	ATGAAGTTAC	180
TGGTACAAAG	ATTGCTTATG	AAACAAAAAT	GGACTTGGTT	CAAACATCAG	AAGTTATGCA	240
AGAGTCACTC	TATCCTGCAG	CACAGCTTTG	CCCATCATTT	GAAGAGTCAG	AAGCTACTCC	300
TTCAACAGTT	TTGCCTGACA	TTGTTATGGA	AGCACCATTG	AATTCTGCAG	TTCCTAGTGC	360
TGGTGCCTCC	GTGATACAGC	CCAGCTCATC	ACCATTAGAA	GCTTCTTCAG	TTAATTATGA	420
AAGCATAAAA	CATGAGCCTG	AAAACCCCCC	AGAACTCGAG			460

## (2) INFORMATION FOR SEQ ID NO:1009:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GAATTCGGCC	TTCATGGCCT	ACGACAAGTT	TTTAAATTTA	CTCTTGAGTA	TGGTTCCAGT	60
GATTTACCAG	AAAAACCAAG	AAGACAGGCA	CAAAAAAGCA	AACGGCATT	GGCAAGATGG	120
ATTATCAACT	GCAGTACAGA	CTTTTAGTAA	TAGATCTGAG	CAACACATGG	AGTATCACAG	180
TTTCTCAGAG	CAGTCTTTTC	ATGCCAATAA	TGGGCACGCA	TCATCAAGCT	GCAAACTCGA	240
G						241

## (2) INFORMATION FOR SEQ ID NO:1010:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GCGATTGAAT	TCGACCACCT	TGTTCAAATT	TGTTATTATT	TTTCTACTTT	TGTATTGATT	60
CTGTTAATTC	TTATCTATTG	GTTTCAGCTTA	CTTTTTTATG	TGGGTCACAT	TTCTCTTCAT	120
TGATTGTGTT	AATTTTCTA	TGTTGATAGA	CACATTTTAT	GTTTCATCACT	TTTTTCTCTC	180

CTCCTTCAAT TATCCTT CTGATTTCCT TTTGTTTCT CATAGTCCG GCCATCTCGA 240  
G 241

## (2) INFORMATION FOR SEQ ID NO:1011:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GAATTCGGCC TTCATGGCCT AGGCCACAAC TCAAAAGCAT TATCTTTTTT AGGGTTAGTA 60  
GAAATTGTTT TATGTTGAT CGAGGTTTGT TTGATTGTCA AAATGTACAG CCACAGCCTT 120  
TTAATTGGG AGCCCTGTT GTCATTCAAA TGTGTACCTC TACAGTTGTA AAAAGTATTA 180  
GATTCTACTA TCTGTGGGT GTGCTTGCCA GACAGGTCTT AAATTGTATA TTTTTTGAA 240  
AAGTTTATAT ACTCTCTTAG GAATCATTGT GAAAAGATCA AGAAATCAGG ATGGCCATTT 300  
ATTTAATATC CATTCAATTC ATGTTAGCGG AACTCGAG 338

## (2) INFORMATION FOR SEQ ID NO:1012:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

TGAATTCTAG ACCTGCCTCG AGCTCCAGCT GCCAACACCC TTGGACACAA TATTCCAGTC 60  
TCCAATGCC ATCTCATGTG GTTGCAGGNT CCTCGAG 97

## (2) INFORMATION FOR SEQ ID NO:1013:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC TTCATGGCCT ACACATTCTG GGGGAAAAAA ACTGGAATTG TTTGTATTTT 60  
GTTTTTTTG GGGGGGATCT TTATGTGAAA AATCAGAGCT ACTTGTTACC ATAAGCCCTT 120  
ACTATCAACA AGATAATTAT TTGTAATCAC TTTTATATCC CAGGTTGGAA TTGCTTTCCC 180  
CTTCTAAGTT ATCTTCCCTT AATAATATTT ATGATACCAG GACAGTGAGG GTATAAGAGC 240  
AAATGTAGTG AGGTATTCAA AAATCCTGCA TATATGGACT CAAAAGTTCT TTAGTTATTT 300  
GAATTATATA TAGCTATATT ATTTTATTAG CTGCGGTTGT CAGAAGATTG CCAATTTTAA 360  
GAGTAAAGAG GAGAGAGATA AGTAATAAAA ATAGAGGAGG GGTACTCTCG AG 412

## (2) INFORMATION FOR SEQ ID NO:1014:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 218 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTATGTC TCCCATCTGT GCTTTCCTA AGTGGGGCTC CCGTGCCGTT CACCTCACAT	60
TCCTGGTGTG TTA CTGGCA GGC ACTCCCA CCACTCCGAA AGGGAGGGCC TTCCTGGGAG	120
GGAGGCAAGA AGGCTCCCCA GCCCCTTTCG CCCCTTTCCT GGGCCTGCGT TCCCAGGGCC	180
TCCCAGGCC CTCTGGCTAC CCCGTGACCT GCCTCGAG	218

(2) INFORMATION FOR SEQ ID NO:1015:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 513 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC TTCATGGCCT ACCTTATTAC CAGACAACCT TAACCAAACC ATTTACCCAA	60
ATAAAGTATA GGCGATAGAA ATTGAAACCT GGCGCAATAG ATATAGTACC GCAAGGGAAA	120
GATGAAAAAT TATAACCAAG CATAATATAG CAAGGACTAA CCCCTATACC TTCTGCATAA	180
TGAATTA ACT AGAAATAACT TTGCAAGGAG AGCCAAAGCT AAGACCCCG AAACCAGACG	240
AGCTTCGGGG GAAGTATGTA GGAGTTGAAG ATTAGTCCGC CGTAGTCGGT GTAGTCGTAG	300
GTTCAGTACC ATTGGTGGCC AATTGATTTG ATGGTAAGGG AGGGATCGTT GACCTCGTCT	360
GTTATGTAAA GGATGCGTAG GGATGGGAGG GCGATGAGGA CTAGGATGAT GGCGGGCAGG	420
ATAGTTCAGA CGGTTTCTAT TTCCTGAGCG TCTGAGATGT TAGTATTAGT TAGTTTGTGTT	480
GTGAGTGTTA GGAAAAGGGC ATACAGTCTC GAG	513

(2) INFORMATION FOR SEQ ID NO:1016:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 74 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

GAATTCGGCC AAAGAGGCCT ACCAAAATAA AAACAGAAAT TATGAGATTG CCTCAACTCC	60
CACATATGCT CGAG	74

(2) INFORMATION FOR SEQ ID NO:1017:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 361 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GAATTCGGCC AAAGAGGCCT AAAGACCTGA GGTCCAGGAT GAGCTCTTTC CCACAGAAAC	60
TTTGACAAAT GTGTGGACAA TAAAGNAGCA CTGCTTCCCT CATTACCACAT AGCTCAGCTG	120
GATTTATAGA TTAAATCTT TTAACGAAAA AGTTCATGTT GAGGTATTTA GATACTTTT	180
AGAGGGTTAA ATACCAAGTT ACAGTGACAT TTAACCGAG TGTCTAGAAC ATGAAGGCAA	240
AGAGTCTGCT ATTCGGAGGT AAATTTTATC AGTGTGTTGAA AGGTGAAGCA TTTGCTCATG	300
AAATGTTGAA TGAATTTCTG TGACATGGCA CGAGGGTGGT AAGAAAAAGT GGGAACCTCGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GAATTCGGCC AAAGAGCTAC GAGAGTGTCA TGAAATATCT CCGAGAGTCC TTCAGTGAGA	60
GGTTGTTTTT TTTTCCTATG GCTGGTGTCA CTTCTCTGG AGCATCTTCA TCGTTTCATC	120
ACAGTCACTT TCTAACTGGA GTCAGTAAGT TCACCTTCTT TAAGCTTCCC AGGCTGCAGA	180
TACAGAGAGT GTCCACATTC CACAGTCAGC TATTTCTACG ATCACTCCAT TTACGCTTGG	240
TTCAAATTTT ACTCCAGTG TTACCACTTC TCATCTTTT GCTGTGTTT ATCTGGGCCA	300
TTTGCTTCTT ATGATTACCT GTTTTGTAA ACTGTCATGT GGGTTTATCC CTGGGAGACA	360
AGGAGACAGC ACAACCCCTT GTTTGCTGT CTGTGAGCGA ACTCGAG	407

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GAATTCGGCC AAAGAGGCCT ACTAAGTTCT GTGAAGTGTA TGTAGCATCT GGGCTATAGA	60
TTTGAGCTT TTAAGTACTC TNGAGAGTGG TGAAGGAGTA TCTGCAGCTC TGATGACAGG	120
NACAGAGAGA GAGAGAGAGA GATGGGTATG CCATCCGTGG ACACCAGGAA GAGTACCGAG	180
GACTGCTGTA GGCTCCTTCA GTTCTAGTTT CCAACTCAA GCAATTTTTA AGTTTTTGT	240
TAATTATGNN TCGGCTCTGC TAAGANANNA AGGTACCTTA CATAAGTCCC TCAAAAGACT	300
TGTGTGTTTG AAGATGGCGC CCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GAATTCGGCC AAAGAGGCCT ATGAATGCTA TATACCCTTT TTATATCAAA AGTCTCAAGC	60
ACTTATTTTT ATTCTATGCA TTGTTGTCT TTTACATAAA TAAAATGTTT ATTAGATTGA	120
ATAAAGCAAA ATTACTCGAG	140

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

GAATTCGGCC AAAGAGCTAC GGCCAAAGAG GCCTAGACTC GCCGCTGNTC TCACACCACT	60
GTGGAACGTC CCCGCCNNTC CCCTTGGGTC CTTATCTTA GGGGACCGGG ACGTCCATCC	120
CTTCTGCACT GGCAGCNTCT GAGCCAAAGC GCCTCTCCCA GAAGCCGGAC TTTCCAGGAC	180
CCTCACTCCC AGCCACACCC TGACACGGCC TGACTGGGGT CTCCTGTGAG TCCCATGCTC	240
GGCTTTGTCT GACACCTCCC AGGACAAGAC CGTCCCTTCT CCCCAAAC TG GGTCTCCAC	300
CAAGAGCCGC GTTCACCCAC GGGGGAGTGG GCTCCACACA GGCCAGTCCT CGAG	354

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAAAGAGGCC TAATCGTCAC ATCCATCAGA GGATTGCTGA TCACTCTTAC CAAGTTCTTT	60
TATGCCATCT CTAGCAGTAA GTCCTCCAAT GTCATTGTCC TGCTATTAGC ACAGATAATG	120
GGCATGTACT TTGTCTCCTC TGTGCTGCTG ATCCGAATGA GTATGCCTTT AGAATACCGC	180
ACCATAATCA CTGAAGTCCT TGGAGAACTG CAGTTCAACT TCTATCACCG TTGGTTTGAT	240
GTGATCTTCC TGGTCAGCGC TCTCTTAGC ATACTCTTCC TCTATTTGGC TCACAAACAG	300
GCACCAGAGA AGCAAATGGC ACCTTGAAC TAAGCCTACT ACAGACTGTT AGAGGCCAGT	360
GGTTTCAAAA TTTAGATATA AGAGGGGGGA AAAATGGAAC CAGGGCCTGA CATTTTATAA	420
ACAAACAAAA TGCTATGGTA GCATTTTCA CTTTCATAGC ATACTCCTTC CCCCTCAGGT	480
GATACTATGA CCATGAGTAG CATCAGCCAG AACATGAGAG GGAGAACTAA CTCAGACAA	540
TACTCAGCAG AGAGCATCCC GTGTGGATAT GAGGCTGGTG TAGAGGCGGA GAGGAGCCAA	600
GAAACTAAAG GTGAAAAATA CACGAACTC GAG	633

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 665 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

```

GAATTCGGCC AAAGAGGCCT ATCTTGCGAG TGGAGTGTCC GCTGTGCCCC GGCCTGCACC      60
ATGAGCGTCC CGGCCTTCAT CGACATCAGT GAAGAAGATC AGGCTGCTGA GCTTCGTGCT      120
TATCTGAAAT CTAAAGGAGC TGAGATTTC AAGAGAACT CGGAAGGTGG ACTTCATGTT      180
GATTAGCTC AAATTATTGA AGCCTGTGAT GTGTGTCTGA AGGAGGATGA TAAAGATGTT      240
GAAAGTGTGA TGAACAGTGT GGTATCCCTA CTCTTGATCC TGAACACAGA CAAGCAAGAA      300
GCTTTGATTG AAAGCCTATG TGAAGAGCTG GTCAAATTC GCGAAGGTGA ACGCCCGTCT      360
CTGAGACTGC AGTTGTTAAG CAACCTTTTC CCACGGGATG GATAAGAATA CTCCTGTAAG      420
ATACACAGTG TATTGCAGCC TTATTAAAGT GGCAGCATCT TGTGGGGCCA TCCAGTACAT      480
CCCAACTGAG CTGGATCAAG TTAGAAAATG GATTTCTGAC TGAATCTCA CCACTGAAAA      540
AAAGCACACC CTTTAAAGAC TACTTTATGA GGCACCTGTG GATTGTAAGA AGAGTGATGC      600
TGCTTCAAAA GTCATGGTGG AATTGCTCGG AAGTTACACA GAGGACAATG CTTCCAGGC      660
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 549 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

```

GAATTCGGCC AAAGAGGCCT ACTTGATTG GATTCACATT GCTTTCATTT CTAAAAATGC      60
TTCACCTCAG GTTCTTGTC TTGGAAATAA ATTTCAAGGT GCATTGTATC CATTTTAAGC      120
TGCTTTATTT TATTTTCACT TGTATGAGCA AATTCTTGGG GGAGCTTTGC TTTTCTCTG      180
CCAGAAAAAC AAAAGGGGGA AATGAAAATC TTTTTGGAA TGAGTCTGT GGGTTTTCTT      240
AACAGCCACC ATGTTTATTA GTTACATTGT GTTTTGGCCA ATCAGTGCAA TGTAACAAAT      300
TTTACAGTTA ATTGCTTTCA ATTGAGTCAG TAAACCTGTG ATAGATAATT TATTTAACTG      360
GAAAACCTAG GTACCCATAA GAAAAAAGAT TCATTCTCTG TGAAAACCTG AGGAATCTGT      420
TGTTGTTTTT ATTTGAATAT GCTCTACTTC TGCTCTAGTA TTTGGTTTGG AATATATTTT      480
GTGGCTCTAA TTACTGTATT TTTAAAAACC CTACCTCCAT TAACAGTTGG TAAAGGCCCC      540
CTTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 92 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```

GAATTCGGCC AAAGAGGCCT AGTTAAGTCT GAACTAGTCT TTTCCTTTGT GATGTGGTTG      60
GAAAGTCTTC CCTGTTCCAA GGAATCCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 383 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```
GAATTCGGCC AAAGAGGCCT AGTTAAAAAC TAATATTTAT ATGACAGAAG AAAAAGATGT      60
CATTCCGTAA AGTAAACATC ATCATCTTGG TCCTGGCTGT TGCTCTCTTC TTAGTGTTT      120
TGACCATAA CTTCTCAGC TTAGCAGTT TGTTAAGGAA TGAGTTACA GATTCAGGAA      180
TTGTAGGGCC TCAACCTATA GACTTTGTCC CAAATGCTCT CCGACATGCA GTAGATGGGA      240
GACAAGAGGA GATTCTGTG GTCATCGCTG CATCTGAAGA CAGGCTTGGG GGGGCCATTG      300
CAGCTATAAA CAGCATTCAG CACAACACTC GCTCCAATGT GATTTTCTAC ATTGTTACTC      360
TCAACAATAC AGCAGATCTC GAG                                     383
```

(2) INFORMATION FOR SEQ ID NO:1027:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 403 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```
GAATTCGGCC AAAGAGGCCT ACATGTGGAC TGCACTGTTT ACTTTTGGTT GGACTGGGAC      60
AATTTGGGGA ATATCTACTA TGTTTATTCT TCAAGAAGCC ATCATCCCAT TAGATGGAGA      120
AACCTGGAGT TATCTCATTG CTATATGTGT CTGTTCTACT GCAGCATTCT TAGGAGTTTA      180
TTATGCCTTG GACAAATTCC ATCCAGCTTT GGTTAGCACA GTACAACATT TGGAGATTGT      240
GGTAGCTATG GTCTTGACAG TTCTCGTGCT GCACATATT CCTAGCATCT ATGATGTTTT      300
TGGAGGGGTA ATCATTATGA TTAGTGTTTT TGTCCTTGCT GGCTATAAAC TTTACTGGAG      360
GAATTTAAGA AGGCAGGACT ACCAGGAAAT ACTACGACTC GAG                                     403
```

(2) INFORMATION FOR SEQ ID NO:1028:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 71 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

```
GAATTCGGCC AAAGAGGCCT AAAACCGAAA CTTGATGAA AATGAAATTC CTCAAGAGAA      60
TGGCACTCGA G                                     71
```

(2) INFORMATION FOR SEQ ID NO:1029:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GAATTCGGCC	AAAGAGGCCT	AGAAACATGT	CTAAGGTNGC	ACACAGCTAG	TANGCGTTAG	60
AAACGTGTCT	CAAACCCAAG	AGGTCTGGCT	CTGGCATCCG	TGATCATAAC	CACTNGCTTT	120
GCCTGATCTA	ACAGTAAAGA	TGGATGAAAA	AATAAATCAA	GTGTGATGAG	TGTTATATAA	180
GAAAGGGGAA	ATAGCAGGGT	TCAGTGTGGA	ACATAGGAGA	GTGGGCCTTC	ATTCCCTCCA	240
GTTGAGGGCC	AAATAAGGCA	TCCCTGAGGA	AGAGACATTA	AGCTGAGATC	TGAAAGGTGA	300
GCCTGAATAA	GTTAGGTGAA	GGAGCATGAG	TAAAGGGAAG	CCGCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC	AAAGAGGCCT	ACTGATGATA	ATAAAACAGA	GCTTTACTTG	GGAGAAATTA	60
GCCTTGAAGG	TGTGACATCC	AAAACAATTT	TTTTAAAAAA	ATTTAGACAA	CTAAAAAGGG	120
AAATGTCAAA	AGGGAGAAAC	TTAAAAAACA	AAAGGAAAGT	AGTCAGAGAA	TCAGAGAGAA	180
AATATGAACA	GAACACAGTA	AAAAGGAATG	GCTACAAGAG	GGATCAGCAA	CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

GAATTCGGCC	AAAGAGGCCT	ATTAGAAATA	AATATCTTCC	TTCAATAGAT	GAAAATGAAA	60
ATACAGAAAA	AAGAGAGCAG	TTGTCAAATT	TAAAAGTTTT	GAATCACTCC	CCAATGTCTG	120
ATGCCTCTGT	CAATTNGAC	TACAAATCTC	CATCCCCATT	TGACTGCAGC	ACTGATCAAG	180
AAGAGAAAAT	TGAAGATGTT	GCTAGTCACT	GTCTGCCTCA	GAAGGACCTG	TATACTGCTG	240
AAGAGGAAGC	TGCTACCCCT	TTTCCTAGGA	AAATGACATC	CCATAATGGG	ATGGAGGACA	300
GTGGAGGAGG	AGGTACTGGA	GTGAAGAAGA	AACGGAAGAA	AAAGGAGCCA	GGAGACCAAG	360
AGGGTGCAGC	AAAGGGAAGC	AAGGACAGAG	AGCCCAAGCC	AAAGAGGAAA	CGAGAACCGA	420
AAGAGCCAAA	GGAAGAGCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(x) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

GAATTCGGCC AAAGAGGCCT AATAAGAGC AAAAAATGT TAATGTCAAG TCAAATTGCC	60
TGTAAATGAC TTAAGGAATA TGTAAATGAT CTGCTCCAA ATGAATAATT ATAAAGCAGG	120
TGCACTGGAG ATATGATCAT TTAAGTAAA GAAACAGCT TCTAATGGCT TCAATAACCA	180
AGATAATGGT GATATTGGAG AAGCCTGTTA AACTCATTGT TCATGCCATT CATTTAATAC	240
ACAAGAGAAC TTCAGATGGA ATCTCCCTGT GGACTCATTG CCTGCTTAT TTAAATAGCA	300
GTTAATTTAA ACACACACCC AAGTCAAAAC TGCATTATTT CTAACACACC TCTTTCTAAT	360
AAACTATGTT CTCCAATAAC AGAACCCCTG TCTCGAG	397

(2) INFORMATION FOR SEQ ID NO:1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC AAAGNGGCCT ATTTTAAAAA TCACTTTAAG NATCCAATAG AGAACAACAA	60
AGCCATATTG AGATGCAGGT TTTAGGAATT TGGTAGTAAT CCCTCACAAG GTCAGACTTG	120
ATCTCTGGA CAATCAGGGC ATGCTAGTCA GCTTTCATGA CTCAGCAAAG CTACAAATTA	180
TGTATTTTGG CTTTTGTGG AAATTGCCAA CCCTACAGAT AGCAAACGTC TCCTCGGTTG	240
TCAAAAAGTA AGAGTAGTTT TTAGAATTCT GCCTTTGGGT CTTGTAGAAT GAAATATTTA	300
CAAGATTGTC TATTTGTTAA CATTTTAGCT CCTTCCTGT TCCTTCAGTC TTGCTGCTGT	360
GCACACCACC AG	372

(2) INFORMATION FOR SEQ ID NO:1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGCC AAAGAGGCCT AAATATGTTT TTTCTGCTT TTATAACTGT AAAATGGAAT	60
GTTCTTCTTA CCTTTAACCT TATGATTGAG CTGTCCATAT CAGGTTTTTT TTTCTACTGA	120
CTATTTATTG GGAAGTCTC ACTTTATTAA TTATGCATCC TGATATCTTA TAGAATGGAT	180
AGTGTATTTC AATATTATTA ATTAAGTGGG CCTTTGTTAG ATATAAAGCA AGATACCTCC	240
AGTAGGTCCT GTTAGCAGTA AGTTTTATAT TGTGGAGGTG AACAAGGTAT TTTTGTGTAA	300
ATCAGTTTAC TAAATTGTAT TATTTTCAAG CTAGATTGTG ACGGTAAGGC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

GAATTCGGCC TTCATGGCCT ACGTCTCAGC ATTATGCATT CCAGTTGGTT TTTCCCCATG	60
CTTTTCCTGA GCTGTATCCA AGTGAGTCGT ATTAATTCA GAGGAGTATT T	111

(2) INFORMATION FOR SEQ ID NO:1036:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 560 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

GAAATTCGGC CTTCATGGCC TANATGAACA AACTCCAGA TACCATTGAT AAGAAATTTT	60
GCATCAAGAA GGGCTTCTGA AAAGACCCAC GTGCTCCAGT CCCAGCTCCA AAAGCCACTG	120
ATGACAAGGG CCCCACTGTG GAACCTAAGT CTGGGAGCCC CCTGACTTCT GGCTGGCCAG	180
AGCTGCGGTC CGTCAAGGGC TTGCCTCGCT TCAGAATCAG TAACATAGAT CTTAAGTGCA	240
ATTGATTAAT AAGCAGTGAG TTAAGTATAG TTCTTTAGC TCTACCGAAC TCTTTTAA	300
AACTCAAAT TGAGCAGCCT TAGAAAAGGG GTTGGGGGGT GGAACCACAG GCCATTTCTC	360
TAAGTGGGCT GCTGTGAAGT TTAAATGAA AGCTCTAGCT TTAGGAGCTT GAGCCATTTC	420
CTGACTGCAC TGGCCTGGCA GTCTGGCTGC TGCAGAAGAG TTTTAAAGA GGGGTCGGAG	480
CCCCCGGTG AGAGCGGGTC TTCTACCAT GTGGGGCTGT ACTACGTGGT GGTCTTGGTT	540
TCTCTTCACA GAAATGCTCT	560

(2) INFORMATION FOR SEQ ID NO:1037:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 322 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

AAATTGGGCA GTGGTAGCAC CTGACCCAGG GCTGCTGTGA GGCCCCCTG GGCTGAAGCA	60
CATGTGGTGC AGAGGGCCAG GTTGGGGTGT GAGTGCCAGT TCCCACTGGC CTTAGGCCCC	120
ATCCACTGCT GCTCCCAGGG CCATGGGTGA GCCTTTCCAC TTCTTATAAA GTAGAGAAAA	180
GTATTATAG TATCTTCTT GGTAATTCCT TTTCTTGGT GATGTTTCATC TGCAGTTCTG	240
TACATTTTTT CAGATCTTCT GATGAACAAA TTCCTTTAAT TTGTCATGTC AACTTGTTA	300
ATATTTTCCT TTGTGACTCG AG	322

(2) INFORMATION FOR SEQ ID NO:1038:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 517 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

```

GAATTCGCTT TCATGGCCTA CACTGTAGCA AATTGCGTTG GAAAAGAACT AGCTCCACAT    60
GTCAAGAAAGC ATGGAAGCAA ATTTGTTCCA GAATCTCTTA AAAAAGACAA AGATGGGAAA    120
TCTCCTCTGG ATGGTGCTAA TGGTGTAGC AGCAAGTAGT GTTCAAGGAT TTTCAACTGT    180
CTGGCAAGGA TTGGAATGTG CAGCTAAATG CATCGTTAAC AATGTTTCAG CAGAAACTGT    240
ACAACTGTCT AGATACAAAT ACGGATATAA TGCAGGAGAA GCTACCCACC ATGCGGTGGA    300
TTCTGCGGTC AATGTTGGCG TAACTGCCTA CAATATTAAC AACATTGGTA TCAAAGCAAT    360
GGTGAAGAAA ACTGCAACAC AAACAGGACA CACTCTCCTT GAGGACTATC AGATAGTTGA    420
TAATTCTCAG AGGGAATATC AAGAAGGAGC AGCAATATGTC AACGTGAGAG GGGAGAAGGA    480
TGAGCAGACG AAGGAAGTAA AGGAGGCCAA ACTCGAG                                     517

```

## (2) INFORMATION FOR SEQ ID NO:1039:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 548 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

```

GAATTCGGCC TTCATGGCCT ACAGAATGAA GAAAGCAAGC AGGAGTGTG GCTCAGTGCC    60
TAAAGTGTCT GCAATAAGTA AAACGCAAAC AGCAGAAAAA ATTAAACCTG AAAACAGCTC    120
TTCAGCATCT ACGGGAGGCA AACTTGTGAA ACCTGGAACA GCAGCATCAT TGTCAAAGAC    180
CAAGAGCAGT GATGACCTTT TAGCTGGAAT GGCCCGAGGG GTAACGGTGA CTAATGGTGT    240
TAAAGGAAAG AAAAGCACCT GCCCATCTGC AGCACCTTCA GCATCTGCCC CTGCCATGAC    300
CACCGTGGAG AACAAATCCA AGATTAGCAC AGGCACAGCT TCTTCAACCA AGCGGAGCAC    360
TTCTACAGGT AATAAAGAAT CCACTTCTAC TAGAGAAAGA TTACGTGAAC GTACCCGATT    420
AAACCAGAGC AAAAACTAC CTTCTGCAGG TCAGGGAGCT AATGACATGG CATTGGCCAA    480
ACGTTCCCGC AGTCGAATG CTACAGAATG TGACGTTCTG ATAAGCCTCC CTATAGTGAG    540
TCGTATTA                                     548

```

## (2) INFORMATION FOR SEQ ID NO:1040:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

```

GAGGAAATGG CCAAACAGAA AGCAGCTCCT GAAGCCAAGA AACAGAAAGT GGAAGGCACA    60
GAACCGACTA CGGCTTTCAA TCTCTTTGTT GGAAACCTAA ACTTTAACAA ATCTGCTCCT    120
GAATTAAGAA CTGGTATCAG CGATGTTTTT GCTAAAAATG ATCTTGCTGT TGTGGATGTC    180
AGAATTGGTA TGAAGTAGAA ATTTGTTTAT GTGGATTTTG AATCTGCTGA AGACCTGGAG    240
AAAGCGTTGG AACTCACTGG TTTGAAAGTC TTTGGCAATG AAATTAAACT AGAGAAACCA    300
AAAGGAAAAG ACAGTAAGAA AGAGCAAGAA CTCGAG                                     336

```

## (2) INFORMATION FOR SEQ ID NO:1041:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	AGGCTTCCCG	AGCAGTCTCC	AAACATATAT	TACATTGAA	60
GGTCGCGCCC	GCCCCGCCCC	GCTCGCGATT	TGGCCCTTCG	GGGCCCCCGT	CCTCCACCTC	120
CTTCTCTCCC	ATGATGCATT	GTCATCTGGC	TTTTATCACC	TGTTCTGCCC	TTGAATTTGA	180
ACATGCCAAA	GATATAAGTA	TTGGATTGCA	GTCTTGCACT	ATTATTTGGT	GAGTTTTTTT	240
TTAATGCATA	CAGCTTTTTT	ATAAGTGCAT	AAATGGGATT	ATATAAACAA	TGTTTAGAGT	300
AGTTTTCTTT	TTACCCTTT	TGCCTGGTTT	GCTCTTCTTC	CCTATCACAT	CCCTTCCAAT	360
CCATCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 563 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAATTCGGCC	TTCATGGCCT	ACGCCATCTT	CCAGTAATTC	GCCAAAATGA	CGAACACAAA	60
GGGAAAGAGG	AGAGGCACCC	GATATATGTT	CTCTAGGCCT	TTTAGAAAAC	ATGGAGTTGT	120
TCCTTTGGCC	ACATATATGC	GAATCTATAA	GAAAGGTGAT	ATTGTAGACA	TCAAGGGAAT	180
GGGTACTTTC	AAAAAGGAAT	GCCCCACAAG	TGTTACCATG	GCAAACTGG	AAGAGTCTAC	240
AATGTTACCC	AGCATGCTGT	TGGCATTGTT	GTAAACAAAC	AAGTTAAGGG	CAAGATTCTT	300
GCCAAGAGAA	TTAATGTGCG	TATTGAGCAC	ATTAAGCACT	CTAAGAGCCG	AGATAGCTTC	360
CTGAAACGTG	TGAAGGAAAA	TGATCAGAAA	AAGAAAGAAG	CCAAAGAGAA	AGGTACCTGG	420
GTTCAACTAA	AGCGCCAGCC	TGCTCCACCC	AGAGAAGCAC	ACTTTGTGAG	AACCAATGGG	480
AAGGAGCCTG	AGCTGCTGGA	ACCTATTCCC	TATGAATTCA	TGGCATAATA	GGTGTAAAAA	540
AAAAAAATAA	AGAGACACTC	GAG				563

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GGCTTGATTG	TTAGAGAAAT	AATGTTGGAA	GAAGAACCTT	CAATAACATC	AGGTGAAAGC	60
CAGACTACCT	ACTCTACTTT	CAGTGCTCCG	TTAAATAAAG	CAAATAGAAA	AAAGTTAATT	120
GAAAGTCTTT	CCCCAGATTT	TTGTCACCAA	AACAAAGGGC	TCTTGCTGAC	AGTTAATACC	180
AGTAGTCAGA	ATGGAAGGCC	TGGAAGAACA	CTTATTAAAG	AAATCCAGAG	TCCTCTGTCT	240
AGTATCTGTG	ATGGCTCCAT	AGCTCTAGAT	GCTGAGCCTG	TTACCCAGCC	AGCATCGCTG	300
CCCAGACACA	GCAGCACACC	AGACCACACC	AGCACACTGG	AGCCTCCTCG	TTTGCTCAAA	360
AGAAAGAACT	TACAAAGTGA	AAAGGAAACT	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs

- (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GAATTCGGCC	TTCATGGCCT	AAACTGGAAA	TCCTCTAAAT	GTCTGTCAAT	GAAGGAATAG	60
ATAAATTGTA	ATATGTTTCT	ATAAAATGCT	GCATAAATAA	GTGAAATTTA	TAAATATACT	120
AACGAATGAA	TCTTGAAAAC	AGAGTTGGGA	GATAAAAGCA	AGCTGTTGAA	GAACATGGTC	180
AGTATCCTCT	CACTTATGTA	AGTTAAAAAC	TCCAAAGAAC	ATTATCTATA	TTGGTAATGG	240
CATAGACATG	TGTGGTAAAA	TATAAAAATA	TTAACTAAAA	GTTCTATACG	CTTCAGGATA	300
TTGTTAGTAT	AATAAGGCAG	GAAGTGGATA	GCATTGGGAT	GAGAACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1045:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 390 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

GATTCGGCCT	TCATGGCCTA	AGCAGCTCGG	GGTTCGGCAG	CAGCGGTCCC	ATCGGCTGAA	60
GTTCGGGGGG	GGTGGGGCGC	CGAGCGCGCG	GGGTGGGGGG	GGTCCTGGTC	TTTGGCTTCT	120
CGACTCGGTC	CTGTTTCGAC	AGCGAACATG	TCGCGGCCTG	TCAGAAATAG	GAAGGTTGTT	180
GATTACTCAC	AGTTTCAGGA	ATCTGATGAT	GCAGATGAAG	ATTATGGAAG	AGATTCGGGC	240
CCTCCCACTA	AGAAAATTCG	ATCATCTCCC	CGAGAAAGCTA	AAAATAAGAG	GCGATCTGGA	300
AAGAATTCAC	AGGAAGATAG	TGAGGACTCA	GAAGACAAAG	ATGTGAAGAC	CAAGAAGGAT	360
GATTCTCACT	CAGCAGAGGA	AGCTCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:1046:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 381 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCGGCC	TTCATGGCCT	ATGAAGCATC	TGGATGGGGA	AGAGGATGGC	AGCAGTGATC	60
AGAGTCAGGC	TTCTGGAACC	ACAGGTGGCC	GAAGGGTCTC	AAAGGCTCTA	ATGGCCTCAA	120
TGGCCCGCAG	GGCTTCAAGG	GGTCCCATAG	CCTTTTGGGC	CCGCAGGGCA	TCAAGGACTC	180
GGTTGGCTGC	TTGGGCCCCG	AGAGCCTTGC	TCTCCCTGAG	ATCACCTAAA	GCCCGTAGGG	240
GCAAGGCTCG	CCGTAGAGCT	GCCAAGCTCC	AGTCATCCCA	AGAGCCTGAA	GCACCACCAC	300
CTCGGGATGT	GGCCCTTTTG	CAAGGGAGGG	CAAATGATTT	GGTGAAGTAC	CTTTTGGCTA	360
AAGACCAGAC	GAAAACTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:1047:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 318 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GAATTCGGCC	TTCATGGCCT	AGGGGTAGCC	CTTGACCGCC	TCCTGCTGGC	ACAGGTCTTG	60
GTTCTTGCT	TTGACGCAGT	CAACAGCGGC	ACAGGCAATC	TTTCGGTCAT	CTTTGAAGGC	120
ATCAGCAGTA	GCAGTAAAGT	GCGGAATGAC	CTTCTTACAG	TGTGGGAACC	AAGGGGCGTA	180
GAACATGACC	AAGGTGTGTT	TCTTCTTCTT	CAGGGTCTCC	CGGAAGTTGT	CCCCACCAG	240
GTGCAACACG	CTTGTCTGCT	GCTCTTCCCA	CGTGGGCTCT	GGGGCGGGG	GGGCCTCAGG	300
GTTTTGCATC	CACTCGAG					318

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 591 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

GAATTCGGCC	TTCATGGCCT	AGCAAATTAT	TCTTCAAAT	GATTATAACC	AGTTGCACCC	60
TGTATTTCTT	TTTGACGCCA	GCACAATGTG	ACCCAACCTA	AAATTGGGG	GAAAAAGAAT	120
GCAGGAGTGA	AATAACCAAG	TCAAAACCAT	GTACTATCTC	CTTGGGGGTT	AGGGATGCTA	180
AGAAGAGCCC	ACAAATAGAG	GATTACTCTT	CCCCTGAATC	TCTAAACTCA	GAAACAATTA	240
CCAAAAAATA	CATAACTCTT	CCTTGTAGGG	CCCTTTCCTT	ATTCATTTAG	GTAGTGTGAA	300
CATTAAGTAT	AAAATAAATT	ATGTTCTTAA	TGCCTCTTAA	ACCACTTACA	TTCAAAGGGG	360
AACAGAAATC	ATTCTAAGCG	GGAAAAACTT	CCACCTTTT	TTTTTTTCAA	GTATCTCTCT	420
AATAACTAAA	TGCCACTTAT	TTGCATTCTC	CTTGTGGATT	TTTTGTCACC	TAAGGAAATG	480
CATTTGATGA	GTGCTGGAAA	CTTCTTAAGT	GCTTTACAGT	TTGTTTTCAT	TGTTTGCAGC	540
GGATCACTGG	ACATCAAAGA	TTCATTGCAC	TTATGAACAA	GGAACCTCGA	G	591

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 355 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

GAATTCGGCC	TTCATGGCCT	AGGTTTCTTG	GTGTTTTTGT	TTTCTGGCAG	GCAGTGAGAG	60
GAGGGGTGAA	GGAGGAGTTT	GGTGCCATTT	CTCTTCTG	TTTTTCTCT	TCTGATGTCA	120
AACAAATGAT	GAAATCCTG	CTATGGGAGC	CCGGGAGCCT	GGGGCCAGGC	TGCTGGGGGG	180
ACGGTAGAGG	GTGCTCTGCT	GACTTGGGGG	GTTAGGGGGG	TTCTGGGGCG	TTGGAGTCCG	240
ACTGGCCTTG	GGCCGAAAGA	GGCTGCCCTG	CTGGGTGCTG	GTGCTGTTGG	TGACGGTGGT	300
GTGGTCTGGC	TCACCCGAGT	CGCTCTCCGT	GTAGCTGTAG	GCCTGTGCCC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1050:

- ( QUENCE CHARACTERISTICS:  
 (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

GAATTCGGCC TTCATGGCCT AATGTGTTAG AAGACTCCCT CTACCTACCT GTTAAAAAAA	60
AAATGACTTT TTTTGCAATT TTTTGCTGTT TCCTTAAAC TAAAGCTGTG TTCTTCTGTT	120
TTGAAGGGTT TCCGCCCCCA ACATATGTTA TCCCCCGCC TGTGGCATT TCTATGGGCT	180
CAGGTTACAC CTTCCAGCT GGTGTTTCTG TCCAGGAAC CTTTCTTCAG CCTACAGCTC	240
TCGAG	245

(2) INFORMATION FOR SEQ ID NO:1051:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 548 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

AATTCGGCCT TCATGGCCTA GGGAGTTGA GGGAGTTCTT TGGTATGCCC GCATCCCGGG	60
GTTGTTTGCT GGTATTATTCT GCCACATTAT CACCTTGGA CGTTTATGGT ACCGGAGATT	120
GTAGGTAAAG TTTGTTTATG CTTCCACGA CCTCCCTCTG TCGGTCCGG ATGGTTTGTA	180
ATTGGGGTTT GCTTTATAGC AGCGAGGCCT GATAGGTAAA GTCTGCTGGC TTCACTGTGG	240
CGCCTAGATA AGGGCTTAGA AATGTAAAAA GGCTTGGGGC AGCATGGAGA GGAGTTGCAG	300
AGTGGGGAGG GGCAGGCAGC ACCAAGAAGC TTCTTGAGGC AGTTTGTCCT TAACAGATTT	360
ATTTTCGGAA AGGAATTCTG AACTCTGAGA CCAAATCAGT ATATTGTGT ATATTTTTC	420
ATATACTTCC AAAGTCTTTT AATTCTTAAT TAACCTGATA TTTAAGTGAA AAGGGTTTAC	480
TCTTTATCCT AGTTAATTAC ATATTCCATT TGTTAATGAA ACTATCCTTT GCTCACTGCA	540
TACTCGAG	548

(2) INFORMATION FOR SEQ ID NO:1052:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 301 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

GAATTCGGCC TTCATGGCCT ACATAATACT TGCTGCTCTT GGGGTTGAAG CCGTTGTTAT	60
TTTCTTAGGA GTTAAGTTGC TTTCCAAAAA GATTGGCGAG CGTGCTATTC TACTGGGAGG	120
ACTCATGTT GTATGGGTTG GCTTCTTTAT CTGTGTACCT TGGGGAAATC AATTTCCCAA	180
AATACAGTGG GAAGATTTGC ACAATAATTC AATCCCTAAT ACCACATTTG GGGAAATTAT	240
TATTGGTCTT TGGAAGTCTC CAATGGAAGA TGACAATGAA AGACCAACTG GTATGCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:1053:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 642 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```
CGGAGGCCCT GAATGCCCCA TCGCACCCCC ACAGCTCGCG CTCCTGCAAG TGTCTTTTCT    60
GGTGTTCCCC GATGGCGTCC GGCCTCAGCC CTCTTCCTCC CCATCAGGGG CAGTGCCCAC    120
GTCTTTGGAG CTGCAGCGAG GGACGGATGG CGGAACCTCC AGTCCCCTTC AGAGGCGACT    180
GCAACTCGCC CGGCCGTGCC TGGACTCCCT ACAGTGGTCC TACTCTCGT GACTCCCTCG    240
GCCCCTGGGA ATAGGACTGT GGACCTCTTC CCAGTCTTAC CGATCTGTGT CTGTGACTTG    300
ACTCCTGGAG CCTGCGATAT AAATGCTGC TGCACAGGG ACTGCTATCT TCTCCATCCG    360
AGGACAGTTT TCTCCTTCTG CTTCCAGGC AGCGTAAGGT CTTCAAGCTG GGTTCGTGTA    420
GACAACTCTG TTATCTTCAG GAGTAATTCC CCGTTTCCTT CAAGAGTTT CATGGATTCT    480
AATGGAATCA GGCAGTTTGT TGTCCATGTG AACAACTCAA ACTTAACTA TTTCCAGAAG    540
CTTCAAAAGG TCAANGCAAC CAACTTCCAG GCCCTGGTTG CAGAGTTTGG AGGCGAATCA    600
TTCACCTCAA CATTCCAAAC ACAATCACCA CCACTCCTCG AG                                642
```

(2) INFORMATION FOR SEQ ID NO:1054:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 496 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```
GAATTCGGCC TTCATGGCCT ACCTGTGAGT ACCTGGATGA AGCATACCCA GGAAGAAGAC    60
TGTTGCCGGA TGACCCCTAT GAGAAAGCTT GCCAGAAGAT GATCTTAGAG TTGTTTTCTA    120
AGGTGCCATC CTTGGTAGGA AGCTTTATTA GAAGCCAAAA TAAAGAAGAC TATGCTGGCC    180
TAAAAGAAGA ATTTCGTAAA GAATTACCA AGCTAGAGGA GGTCTGACT AATAAGAAGA    240
CGACCTTCTT TGGTGGCAAT TCTATCTCTA TGATTGATTA CCTCATCTGG CCCTGGTTTG    300
AACGGCTGGA AGCAATGAAG TTAAATGAGT GTGTAGACCA CACTCCAAAA CTGAACTGT    360
GGATGGCAGC CATGAAGGAA GATCCACAG TCTCAGCCCT GCTTACTAGT GAGAAAGACT    420
GGCAAGGTTT CCTAGAGCTC TACTTACAGA ACAGCCCTGA GGTCTGTGAC TATGGGCTCT    480
GAAGGGGACA CTCGAG                                496
```

(2) INFORMATION FOR SEQ ID NO:1055:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```
GAATTCGGCC TTCATGGCCT AATGTGCTTA ACCCTCAAGA AATTGTCACA ACTGAAAGAC    60
GGGAGCAAGC TGACACTGCA AGGAACACAT GATGCTTTGG AATGGGTGGC CTGCGTATTC    120
AAACACATCA AAGCAGCAGT TACTTGAACA ATCGGAACCT CTTCAAATAC TGGCCCACTT    180
```

CTTCCTTGGG GTAGGGCCGG AGAGCAATAC AAGTGGCGAT ATTCTCTGGT TGCTCAAGCC	240
ACAGCATGTG GTCAATGTTC TTCTGTTGCA GGGTCTCGGC CAGCTCCTTT AGGGTGGTCT	300
CATCTGGGGC CTCGAG	316

## (2) INFORMATION FOR SEQ ID NO:1056:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

CGGGTTAAGG TAGCATCAGA ACCCTGGACG CGGAGTCAGG GCTGGCAGAT AGCAAGGCAT	60
CTCTCGGAGC GTTCTTGGA GGCGCCATCT TGCCCGACTC CATGTTATCC AGCCACTCGT	120
CATCCCGCGG AGACAGAGGA GAGAGGAGAG CTCGCGGGGA AGCAGAATTC CCAACCGTTC	180
CATCCAACAA TGAATCGGT ATCAGGATGT GGTAGCTCC CTGTACCAGC GAGTGTACAG	240
TCAGAGACTG GCCAGTCCCC TTGTTACAAA CACTGTAGAA GAATGTGACA GCAGCTGCTG	300
TGGCCAGTAG ATTGCTTACC TGTAGTTGCA GAGAAGCCCA AGAGTTTGAT GATGAGGCAG	360
TTCCTCGAG	369

## (2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 540 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC TTCATGGCGT ATCTCATTCT GTCTCCCAGG CTGGAGTGCA GAGAAACAAT	60
CTTGGCTCCT GCAGCCTCAA CCTCCCAGGG TCAAGTGATC TTGTTGCCTC AGCTTCCCAT	120
ACAGCTGGAA GCACAGGTGC ATGCCACCAC ACTTGGCTAA TTTTGTATTT TTGTGGAGA	180
TAGGATCTCT CTATGTTGTC TAGGCTGGTC TTGAACTCC CTGACCCCGT GATCCACCTG	240
CCTCGGCCTC CCGAAGTACT GGGATTATAC GCATGAGCCA CCGTGCCAG CCGTCATTCT	300
TATATTATTA TTTCTAGGT GTCTCTCCTG AAGACTATCT TCTGGTCTCG AAATGGACAT	360
GATGGATCCA CGGATGTACA GCAGAGAGCC TGGAGGTCCA ACCGCCGTAG ACAGGAAGGT	420
ATGGCTCTGT TGAATCCGC ATAGTGTGGA AATGAGTTTG CCCTGGAAAG GGAAAGAACA	480
GCTTCTTGCC CTCAGGTTTC TCACCTTCTC CTCTCCTCAC TCTACCAAG GACCCTCGAG	540

## (2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTTATGCNAN NTTCTTTTCA AAAAAAAAAA AGAAAAGAAA TTGCAAAAGT	60
---	----

TCTTCTAAAG	TTAAATCCAA	GGTGGTTTGT	CTAGCAGAGA	GCCAGGAATT	CTTTCTAATA	120
GTGGGCAGAG	CCCAGAGACA	AGGGGAAGAA	AGATGACCTT	CTCCCCAGTC	CTTCCCAGCA	180
CCATTTTGT	TTCACACCAG	GCTTGTGGCA	TTTTGGTGCT	CACAGGGGTT	TTGCCTTCTG	240
ACCTCTCCTT	GGAGTAGGCC	ATTCTCATGC	AGGGCTCACC	CTGAGGCAGG	AGGACCAAGG	300
GCTCCCTGCG	TCCACGGACC	ACGTATGCCT	TGGTGGTCAC	TCCCATCGGG	GCTATCAGTT	360
CTGCACTGTG	CCCTGGTGCG	GATTTTAATG	CATATTTTAA	TATATAAATG	TTCCCAAAGG	420
CCGTCTCGAG						430

## (2) INFORMATION FOR SEQ ID NO:1059:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAATTCGGCC	TTCATGGCCT	AACATTAAGG	AAAAAGCCTT	AATGGCCATG	AATAACCTGA	60
GTGAGAATTA	TGAAAATCAG	GGCCGGCTTC	AGGTGTACAT	GAATAAAGTG	ATGGATGATA	120
TCATGGCCTC	TAACCTGAAC	TCAGCAGTTC	AAGTAGTTGG	ACTAAAATTT	CTAACAAACA	180
TGACTATTAC	TAATGACTAC	CAACACCTGC	TTGTCAATTC	CATTGCAAAC	TTTTTCCGTT	240
TGCTATCTCA	GGGAGGTGGA	AAAATCAAGG	TTGAGATTTT	GAAAATCCTT	TCGAATTTTG	300
CTGAAAATCC	AGATATGTTG	AAGAAACTTC	TCAGTACCCA	AGTGCCAGCA	TCATTTAGTT	360
CCCTCTATAA	TTCTTACGTG	GAATCAGAAA	TCCTTATTAA	TGCCCTTACT	CTATTGAGA	420
TTATCTATGA	CAATCTCAGA	GCAGAAGTGG	CCTCGAG			457

## (2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 474 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC	TTCATGGCCT	ACAACCCCGC	GATAACCACT	GCCGAATGCC	TGAAGGCGCT	60
TGAGCACGTG	TTTGGGAGCG	TTGAGAGCTC	TACGGATGCC	CCGATCAAAT	TTCTGAACAC	120
TTATCAGAAC	CCGGGAGAAA	AATTGTCTGC	TTATGTCATT	CGTCTGGAGC	CTCTGCTACA	180
GAAGGTGGTA	GAGAAGGGGG	CCATTGATAA	AGATAATGTG	AACCAGGCCC	GCCTAGAGCA	240
GGTCATTGCC	GGGGCCAACC	ACAGCGGGGC	CATCCGAAGG	CAGCTGTGGC	TTACCGGGGC	300
TGGGGAAGGG	CCAGCCCCAA	ACCTCTTTCA	GTTGCTGGTG	CAGATCCGTG	AGGAGGAACC	360
CAAGGAGGAG	GAGGAGGAGG	CTGAGCCAC	CCTTCTGCAG	TTCCGGCCTGG	AAGGGCACTT	420
CTGAGTGCCA	GGAAAGGCAG	CTTTAGTGCA	GACCTAGATC	ACAGCTACCT	CGAG	474

## (2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 365 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT ACCAGCCTCT GTTAGATATG TCCAGAGATG GAAACTCACT	60
CCCCTACAAA AGATGGAGCT TAATGGAGAA ATTGCAACTT TCATTAAAAA ACAAAATTCAG	120
ATGAAATATC AGTAACTGTC TTGGACAGTG CTGAAATCAG GTGGTTAAAC GGGTAAACAA	180
AATATACTGT ATTTTGAGAA ATGGCACAAA AACAGGCAGT CATCTTTAAT GGCTATGCCT	240
AGGCAAACTA CTAACATGCA TTGTGAGAAT GCCGTGTATA CCTCACGTAC TGTGTACTTT	300
GTACATATAT TTTACCTTTT ATACCTATGT TCGATTTTGT TTTGTTTTGT CCTGGCGTCC	360
TCGAG	365

## (2) INFORMATION FOR SEQ ID NO:1062:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AGGAGCCGCA GGGCCGTAGG CAGCCATGGC GCCCAGCCGG	60
AATGGCATGG TCTTGAAGCC CCGCGTCGGG TCCCATCCGG CCCATCGTGC GCTGCCCCAC	120
GGTTCGGTAC CACACGAAGG TGGCGGCCGG CCGCGGCTTC AGCCTGGAGG AGCTCAGGGT	180
GGCCCGCATT CACAAGAAGG TGGCCCGGAC CATCGGCATT TCTGTGGATC CGAGGAGGCG	240
GAACAAGTCC ACGGAGTCCC TGCAGGCCAA CGTGACGCGG CTGAAGGAGT ACCGCTCCAA	300
ACTCATCCTC TTCCCAGGA AGCCCTCGGC CCCCAAGAAG GGAGACAGTT CTGCTGAAGA	360
ACTGAAACTG GCCACCCAGC TGACCGGACC GGTATGCCC GTCCGGAACG TCTATAAGAA	420
GGAGAAAGCT CGAG	434

## (2) INFORMATION FOR SEQ ID NO:1063:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

GAATTCGGCC TTCATGGCCT ACTTAATTTC AGAGCCGGGT TCGCCGTCGG ATCAACCTCC	60
AGGAGCTAGC AGCGGGCGCG GACCGGGCAG TTTCCGCGCT CAGCACAGGC AGCTCGCGGT	120
CATGGGCGGC TCAGCCTCCA GCCAGCTGGA CGAGGGCAAG TGGCTTACA TCCGAGGGAA	180
AACTGAGGCT GCCATCAAAA ACTTCAGTCC CTACTACAGT CGTCAGTACT CTGTGGCTTT	240
CTGCAATCAC GTGCGCACTG AAGTAGAACA GCAAAGAGAT TTAACGTCAC AGTTTTTGAA	300
GACCAAGCCA CCATTGGCGC CTGGAATAT TTTGTATGAA GCAGAGCTAT CACAATTTTC	360
TGAAGACATA AAGAAGTGA AGGAGAGATA CGTTGTAGTT AAAAATGATT ATGCTGGGGA	420
GAGCTCGAG	429

## (2) INFORMATION FOR SEQ ID NO:1064:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```

GAATTCGGCC TTCATGGCTT AGTCTTGGTC ATGCCTGGGG AGCTCAGAAC GCCCCGGCTT      60
GGGCCCCCAGG CCCATGGACT CCCTTCCCCA TTCTGCCCTC CCATATTCCC CTTTTTGGT      120
CCCAGACACC AGCACAAAGA AAGGAGGGTT CACAGAGGAA GGCCAGGGCA GAGCCTGGCC      180
CCAGGGAGGG GATGAGGACA TTTCCGGTCC AGGTAGCTGC CGGCTGCTCT GGGAGGAAGA      240
GCCATGCGTC TGTAAACTGC TGGGGCTGGC GGCCCGCCCC ACTGCAGGGC CCAGCCTTGA      300
CCCCTGCACG TGGCCATCCA GCTGCCCTCT GGCTGCCCCT GGCCTTGGCA CAGGCATCGA      360
GCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```

GAATTCGGCC TTCATGGCCT AAGATGGTTG CCAAGCAAGG AAAACTTATT TTATATTTTT      60
ATACTGTATC CAGGCTATGC CTGGGTGTGG AGGCTTACT CGAG                        104

```

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 0 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCCTGG CCTTTGGGAA CTCATATCCT GACCTCAGAT TGAGAAGACC ATCTGTCAAG      60
GCATATTAGT AATCACCTCC GGTAGAAAAG ATTTACGGG TAACAAGTAG GCCATGAAGG      120
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1068:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 340 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

GAATTCGGCC	AAAGAGGCCT	AAGTTCAAAT	AATTTAGAA	TGGTGTCTGT	TAGGAATGGT	60
CCAGAGTTG	GTTGGGGGAT	GAAAGGAGGA	CAGGGACTAC	AAGGGATATT	GCAAATGACT	120
GCCTTAAAT	ACCAACATAA	AGCAGTGGAT	TCCCAGAGTC	CTCCAATCTG	TTATCAGACA	180
CAAAGATTG	AACAAAATA	AATGAAAGAT	AGAAATCAAA	AGGTTTCTT	TGAAGTCTCA	240
GGGTTATTG	CTTCTGAAAG	CAAATGTGTT	GTTCTTGCCT	CATAGCAAAG	TACTTTTCCT	300
ATTGATGCAT	CACTTTATTG	CTTTTCTGTC	TTCTCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:1069:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 432 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

GAATTCGGCC	AAAGAGGCCT	AGACGGGACC	TGTTTGCAGA	CAAGATGCAA	GGAACACAGC	60
CTGCAGTGAT	TCACAGCTTT	GTTTCAACCC	ACAAACCAGA	AAATTAGCTC	TTGGGTCTGT	120
GGGCCCAAAG	TGAACTTTAA	AGCAATAAAG	ACTGGAAGCA	GGTCTGGGAA	GGCAATACAA	180
AATGTGGAGA	GTTGAAAAGG	AGGCAGAGCT	GGCAGGAATG	GGTAGGGAGA	GTGTTTGGTA	240
AATAGCACCT	TTGAGTCAAA	ATTGAGCAGT	TTAGAAATCC	AGGAAAGGGG	ACTGGCTGTG	300
GGGAGGAGAA	CCTGGGGGTA	GAGGAAGTGG	GGTGAAGATT	CCTCACTAAG	GGGCAACAGC	360
AGGAGGGTGG	CCATCCTGGC	CAAATGCCCT	AGCCCTGTCC	TTCTTAAGGT	GATTCGGTTT	420
GGGAAACTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:1070:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

GAATTCGGCC	AAAGAGGCCT	ATTCTAGACC	TGCGCAAGCA	CGCTGAGGAG	AAATTCATTG	60
AATTTGAAGA	CTCTCAAGAA	CAGGAAAAAA	AGGACTTACA	GACCCGAGTG	GAATCTTTAG	120
AATCTCAAAC	AAGACAACCT	GAGCTGAAAG	CGAAAACTA	TGCTGACCAG	ATTAGCAGAC	180
TTGAAGAAAG	AGAAGCAGAA	CTGAAGAAGG	AATATAATGC	ATTACATCAA	AGACACACTG	240
AGATGATCCA	TAATTATATG	GAACATTTAG	AAAGAACAAA	ACTTCATCAG	CTCTCAGGGA	300
GTGATCAACT	AGAATCCACA	GCTCATAGTA	GAATTAGAAA	AGAACGCCCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:1071:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 387 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```
GAATTCGGCC AAAGAGGCCT ATTCTGTCTT ATCAAAGGAA GTAAAGAAGT AAAAACAAAA    60
AATGAACGTA TACAAGCACA GATTTTGTAG CTTCGATTGT AGAGAAATGG TAGTTATGTG    120
GCTTGCCAAG AAAGTGCATC ACCTACTTCT GCTTCTGGGG ACAGAGGTGA AGGGGTCTGT    180
TCTGGAACCT TCTAAGGAGG CCATCTTCGT TATTACATCA GGAAGTTTC TAGTCAAAT    240
GTTATTCCTG TCTACAGGA AAAACAAAAG CAAAACACAA AAGAACACTG CTCTAATGG    300
CATCATAGCA AGGAGTTTAT CTAGAAAGAT GATGCCAGCA GTCACCTCTT TTCCAGGAAG    360
ACAGAAACAA AAACCGTTCT CCTCGAG                                     387
```

(2) INFORMATION FOR SEQ ID NO:1072:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```
GAATTCGGCC AAAGAGGCCT AGAAAGTGCC AAGAGGGAAG AAAGGCACTC TGAGAAGTTA    60
CGGCAAAGAA TTGGGAAAGT TGTCAAACA AACAAACAAA AAATAATAGA TTTGTTTGTAG    120
CAAACGACTT GGCTAAAAGT TACAAACCTA ATATATGTAA TACACAAGAC TACTTCATCA    180
TCTTTCTTTC TGACAGTCTC ATGTTCTTTT TCAAGCCAAA AAGGGACATA TTCTTATAGC    240
TGGAAGTTTA AGGGAAAGAC TTCCAACCTA ACTCTGTGTT GAGGGTGCAA ATCATGTGAT    300
GAAGGCTCGA G                                     311
```

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

```
GAATTCGGCC AAAGAGGCCT ACGAAGAAAA AATATTTTGT AGAGAATTTT CCAGATTGAA    60
AGAAGATCTG AAAGGGAACA TTGACAAGCT CCGTGCCCTC GCAGACGATA TTGACAAAAC    120
CCACAAGAAA TTCACCAAGG CTAACATGGT GGCCACCTCT ACTGCTGTCA TCTCTGGAGT    180
GATGAGCCTC CTGGGTTTGT CCCTTGCCCC AGCAACAGGA GGAGGAAGCC TGCTGCTCTC    240
CACCCTGGT CAAGGTTTGT CAACAGCAGC TGGGGTCACC AGCATCGTGA GTGGTACGTT    300
GGAACGCTCC AAAAATAAAG AAGCCCAAGC ACGGGCGGAA GACATACTGC CCCCATGAC    360
CCTCGAG                                     367
```

(2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

```

GCTTTATCTA TTTCATTTAA TCTAAATGTT TTCTGCAATT GTTTTCCTT TAAACTTTGC      60
TTCAAAAACCT CTCATCTAC TTGAGATCTG GGCATTGTGG TTTTGGTCT CGCATTTTCC      120
CTGCCCTCTG ATGGCTTAGC AGGGGACCCT TTCTTCTTTG GCTGGTGGGG CTCTCTGGA      180
TCAGTAATGT CCACATGCCG CTCTGCAGC AAGGTTTTCT CTTTGTCTGA TACTGTAAC      240
CGGGGGGCTC TGTTTTCAA GGAATGAGAG GCCTCTGGTT TTCGAAGCCC CCCTCTGCCT      300
TTGCTACCA CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

```

GAATTCGGCC AAAGAGGCNT AGAACTCGGA GACCAGAAAG TGAACCTCTG GGCAGAGATG      60
GNCCTGCAGA GCCAGGTGTG GTCTCTGGCC ACACCCATGC CCATGGCGGA GAGCTCCNTC      120
TACCGGCAGC GGCTAGAAGT CATCGCTGTA AGTGACGCC TCCCGCGGCC CTGGGCACCC      180
CCAAACTTTC CACCATGCTC CCTTCTCGTC TCTCCGTCAT CTCTGCGGAG AGCGCCCTCA      240
GCTCCAGCCC CGCCAGGGC TCCCCACACC AATTCTCCAG CCCCCTCTGC CCCCAGTTC      300
CTGTCTGGTC ACTACACCC TCAGAATGGG GAGCTGTGGC CCCCACACTT CCAGAGCCTG      360
CATCGGCTAT GCCTCATTCC TGAACCCAG CCTCCCAAAA ACCCATGCC TGAGCCGCAT      420
CTCCCGGACC TCGAG                                     435

```

(2) INFORMATION FOR SEQ ID NO:1076:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

GGAATTCGGC CAAAGAGGCC TAGTGGGAAA AGCTTGGATT ATCAAAACAC ACAACAAATG      60
ATAGAACCAA ATATATAGAT GATACAGTGA AGCACAAGGT CAAAATTTA AAACGGGTGA      120
GCTCTTCATT AATGCATTAT TTTGTTTATT TAAGAGCTTT TTGTATGGAC TGACTGCAAT      180
AATTTTGAAT TTTCTCTTTA GAAGTTTTAA TGTCTTTTA CATTTTCAA TTTAGTTTTTC      240
CATGAAAGTG AATAGGTTTT TATTTAAAT TTTTGTCTAG TCTTGGTGAA ATCAGATGGT      300
GACTCTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:1077:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC AAAGAGGCCT AGGAAAACAA ATGGCTTCTT CAAGTCCTTG ATTTTGGAT      60
ACACAGGATG CAGGGCTGTG TGTAAAGAAA GGCAGCGTTT TCCTCTCTTA GAGCCTCTGA      120
CTGACCTGAG GCGCAGGTGT TCCTGGGAGA CTGGAGGGTG GGCTCCATGG GGGTGTCTGG      180
GCCCCACCTG GCAGGGCTCT TGGCAGTGAG CCAGTGGAGG TTGCCTCCCA CGTGTGGCTG      240
GCCCTGTAGC CTGGCTCTGG AGAACCTGCA ATTCAGGCTG GAAGAGACTT TGGAGCAGCT      300
GGAGTGTGAG GTCTGCCTGG GTCTGGTGGG GAGTGTTTT ACTTTGCCAG TGATAGACTG      360
AAATGCCCTC TTTGAGGACA AGGTGGCTAT CTCGAG                                396

```

## (2) INFORMATION FOR SEQ ID NO:1078:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

AGTGTTTTCC TGTATTTTCC CATATTCTTT GAAACTCTGC TGAAAGGAGG CTGTCAGTCA      60
GGGTTGTATA AATAGAGTCC TGGGTAAATC CTTGAAGCTT GTCATTCCAC AGCAAATCCA      120
CATGTTTCTT CAATGGCTGT TAGCAGCTTT TCATATAGCT TTTCATAGCT TTCATAGGGT      180
GGAATGTCTA TTCGATTGAA GCAAGTGTGG GCTTTCGGCA GGTTGTTAGT GCAGGCATCA      240
ATCTGGTGTA TGGTAAAGAG TCTCGGCCT GCAGCACCTT GCAATGCTTT GAAGCCCTGC      300
AGAGGCACTC GAG                                313

```

## (2) INFORMATION FOR SEQ ID NO:1079:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

```

GAATTCGGCC TTCATGGCCT AAAAATGAAC TATAATAGTT CTAATTTACC TCAAGTTTTT      60
CTAAGATAGC AAATAAATTG TAGTGTCACA TTAGCTTCCT AAGTAAGGCA AATTGACCTG      120
CAATAAAAGG TTCTAGTGTG AGACAAATTA AACCTTCAAC TTCCAACCTC GATTCTAAT      180
ATAATTCAAA TTGTCACTGA AGCTTTTATT AAGAATAAAA ATATATTTAG TCITTATTAT      240
TTTCTGTAAA TGACTTATTT TCAGATGCAC AATCGTGAAA TAATGAAGAT TTTGATCAGT      300
TGTTTTTGTC TTTTTCCTTT GAAAGGTATT TTCGCAAGAC CATTAAACT CGAG                                354

```

## (2) INFORMATION FOR SEQ ID NO:1080:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 641 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

```

GAATTCGGCC TTCATGGCCT ACTCCGGTGG CTCCCCATC TCTCAGGCGC GATGGCTACG      60
GGCGCGGATG TACGGGACAT TCTAGAACTC GGGGGTCCAG AAGGGGATGC AGCCTCTGGG      120
ACCATCAGCA AGAAGGACAT TATCAACCCG GACAAGGAAA AATCCAAGAA GTCCTCTGAG      180
ACACTGACTT TCAAGAGGCC CGAGGGCATG CACCGGGAAG TCTATGCCTT GCTCTACTCT      240
GACAAGAAGG ATGCACCCCC ACTGCTACCC AGTGACACTG GCCAGGGATA CCGTACAGTG      300
AAGGCCAAGT TGGGCTCCAA GAAGGTGCGG CCTTGGAAGT GGATGCCATT CACCAACCCG      360
GCCCCGAAGG ACGGAGCAAT GTTCTTCCAC TGGCGACGTG CAGCGGAGGA GGGCAAGGAC      420
TACCCCTTTG CCAGGTTCAA TAAGACTGTG CAGGTGCCTG TGTACTCGGA GCAGGAGTAC      480
CAGCTTTATC TCCACGATGA TGCTTGGACT AAGGCAGAAA CTGACCACCT CTTTGACCTC      540
AGCCGCGCTT TTGACCTGCG TTTTGTGTG ATCCATGACC GGTATGACCA CCAGCAGTTC      600
AAGAAGCGTT CTGTGGAAGA CCTGAAGGAG CACTGCTCGA G              641

```

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

```

GAATTCGGCC TTCATGGCCT AGCCCTTTTT GGTTTTCTAA TTAGGAATAT AGCATCTGCA      60
AATAATGACA GATTGTTTCT TCTTTTCTAA TTCTTACAAC TTTTGTACT TTTTCTTGTC      120
TAATATGCTG CCTAGAACTG TAGAGCTTCC TGCTCTGTG CCTCCCTTTT TTTTATTCTT      180
ATTTTTAGGA GCAACCCTAT TAACTAAGCC TCACTCTTAA AGGGGAAGTT TTCACCACTA      240
AGTACCTTTC TAATCTAGGT TTTTGTGGA TACCTTTTAT CAGACTAATG AAGTTTAATA      300
TTGTTAAATA CTTTGAATTG TCTATATTAT GATGATAGTA TGCTTTTTTC TTTTATTTAT      360
TAAATGGTTC CCAGGAATTT GTGAACAGCT TGGGCAATAC AGTGTGACGC TCGAG              415

```

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```

GAATTCGGCC TTCATGGATC CTGATACCAA ACTCATCGGA AACATGGCAC TGTTCCTAT      60
CAGAAGTCAA TTCAAAGGAC CTGCCCCCAG AGAGACAAAA GATACAGATA TTGTGGATGA      120
AGCCATCTAT TACTTCAAGG CCAATGTCTT CTTCAAAAAC TATGAAATTA AGAATGAAGC      180
TGATAGGACC TTGATATATA TAACTCTCTA CATTTCTGAA TGTCTGAAGA AACTGCAAAA      240
GTGCAATTCC AAAAGCCAAG GTGAGAAAGA AATGTATACG CTGGGAATCA CTAATTTTCC      300
CATTCTGGA GAGCCTGGTT TTCCACTTAA CGCAATTAT GCCAAACCTG CAAACAAACA      360

```

GGAAGATGAA	GATGAGAG	CCTATTTACA	ACAGCTAAGG	CAAGAGCTG	GA	420
TTGTGAGAAA	GTTTTCGACC	CTCAGAATGA	TAAACCCAGC	AAGTGGTGA	CTTGCTTTGT	480
GAAGAGACTA	CTCGAG					496

## (2) INFORMATION FOR SEQ ID NO:1083:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 342 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC	TTCATGGCCT	ATTCACAGGT	TTATTGGCTT	CTTCTTGAAA	TGCCTGTTCA	60
TGTCTTTTGG	CCACTTTTTA	TATGGGTCAT	TTGTCCCTTA	TGATTTATA	AGGGTCTTTT	120
ATTTTTCCTC	TAGATATTAA	TAGTTTGGC	CAGATGTTTG	CAGATGCTT	TTCTCAATAT	180
GGCTTGCTT	TTCAGTTTGG	GTGTCTTGAT	GATCAGAAGA	AGTTCTTCAT	GTAGTTGATT	240
TATTGACCTT	TTCCATTATG	GTTTCACTC	TTTGACTCTA	GGAGCTTAAT	AAAAGCATGA	300
AATATTTATT	GATTGTCCAT	TGCTAATCCG	AAAACCCCTCG	AG		342

## (2) INFORMATION FOR SEQ ID NO:1084:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 374 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAATTCGGCC	TTCATGGCCT	AACTTACTGA	ATGATAAAAC	TTGCAGCTAA	ATTTGTCTTC	60
AACACACCTT	TCTCAGAGCA	TCAATTACAT	TATTCATTAA	GGAATAAATA	GCATCTCTAA	120
AGCATGTATC	AACATCAGAA	CTAAGCTTTA	TGAATTATAC	AGTGCATCTA	GTGATTCCTT	180
ATTCTAAAAG	ATCTCTGGTG	CCATCTACTG	AATGCTTTT	AAAGGAAAAA	ACATGAAATC	240
AAATAATAGA	TTTTCACTTA	ATTCAATTTT	TTGTTTTGTT	TTAATTTTCA	ATTACTAGAC	300
AGATCTAGGT	TTATAAAAGA	ACTAAACAGG	AAGTACAGAA	TTCCCATATA	ATCACTTTTC	360
CCCCAAGACT	CGAG					374

## (2) INFORMATION FOR SEQ ID NO:1085:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

GAATTCGGCC	TTCATGGCCT	ACTGGAACAC	CTTCTCGCTG	CCGCCATACC	CTGCCTTCTC	60
CAGCGACAGC	CGCCCCGTTC	TGAGCTCCGC	CTCCTTCCTC	GGCAGCCAGC	CCTGCCCAGA	120
CACCGACTAT	GCCCCCGTGG	CCACCGCCTC	CAGCTTGCCA	CCAAAGACCT	GCGACTTTGC	180
TCAGGACTCC	TCCTATTTTG	AGGACTTCTC	CAACATCTCC	ATCTTCTCCT	CGTCCGTGGA	240

CTCCCTG GACATCGTGG ACACGCCCGA CTTCTGCCG CACAGCC TCAACCAGGT 300  
 GTCCACCATC TGGGACGATA ACCCTGCCCC CTCCAACCTC GAG 343

## (2) INFORMATION FOR SEQ ID NO:1086:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 531 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

GAATTCGGCC TTCATGGCCT AGGGCTGACG CGCCACTATG TAGCGGGTTT CGGGCGGGCC 60  
 ACGCGTGCGG GACAGGAACC CAACCCAGC CGACCTTGAG CTCCAGGAGT TCGTCTCTTA 120  
 CGTCTGCGGA AGTGCAGCTG CCTCAGTTCT TAGCGCAGGT TGACAACTAC AGGCACAAGC 180  
 CATTGAAGCT GGAATGTCCT GTTGCTGGTA TTTCAATTGA CTTAAGCCAA CTATCCCTTC 240  
 AGTTACAATA GGAAAGTGCC TCTAATAAGG CCAAATATGC GTACTAACTT GTAGCAACCA 300  
 CGTGTCCGTG CAGTGCCACA GGAGCTAGAG CAGTGACAAT GCTGGTGGCA ACAGGGCAGT 360  
 GTAGCAGGTG CTTATGTTT ACCTTTTCAA CCTTTTCATT TAATTGTCAC AACTCGGAGG 420  
 TGGATTCTGT TAGGGACAGG CTGCCCCAGG ACCACTCCGC CCCCCTAAC TCAATGCAGC 480  
 TGACCTTAC CCTGAATACT CTGCAGCTGC ATTCCTGAAC CATATCTCGA G 531

## (2) INFORMATION FOR SEQ ID NO:1087:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 374 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

GAATTCGGCC TTCATGGCCT ATGACTAGCC ACCAGGAAGG ACATTCCCTG CTCAGCTGTC 60  
 CCATTAACGT CACCTGCTCC TCTCCTCCAC GTTAGTTTTT TTCTAGCCTG TTTATTCCTC 120  
 CCTGTAAGAG AAAAAGAGAA AAGCCTATTT CTATCTGATC TTGAGATGC TTGCAGATCT 180  
 TACCTTTGAA GCATTCTCCT TATTGCAATA GTCTCCCTGA CCCTATTGCA ATAGTTCCTC 240  
 TCTCCTGTT TGTATTACC CATTGAGGCT GCTATATATA GCAAAATACC ATAAGCTGAT 300  
 AGCTTATAGA CAATATAAAT TTAATTCCCA CAGTTCTGAA GCCCCGGAAG TCAAAGATCA 360  
 AAGTAGGCCA TGAA 374

## (2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 288 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAATTCGGCC TTCATGGCCT AGGAATGTTT CCTTTTGGTT CATTGTAGGC ACATCTGAAA 60  
 AAGAAGTTAT GAGTCACTCG TAGTGAGGTT TTAATTGACC TGTGACTTGG GATCTCTGGG 120



GATCATTGGC	ACTCTGTCTT	ACACTGTTAT	TTATAATTCA	TGTCIGATCA	TCTTCTTAAG	180
GAAGTCTGCA	TCGTTTGCCT	TATGTAGAGC	ATTAAACACA	AGGATCTGNC	ACATTACTTC	240
TGTTGCCATT	TTTGCTTCTC	ATATCCCTGA	CCACCCACCA	CACTCGAG		288

## (2) INFORMATION FOR SEQ ID NO:1089:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC	TTCATGGCCT	AAGTAGTTAA	ACTCATAGAG	TTGCAAACCTA	GAAAGGTGGC	60
CCCCAGGGGT	GGGCAAGAGA	GAGGAGTGGG	GAGCTTGGTG	AATGGGTGCC	ATTTCCATTT	120
TGAAAGATAA	AACTGTTCCG	GAGACGATGA	CGGTGATGGT	TGCTAAACAA	TGTGAACGTA	180
CTTAATGTCA	TGAAACTGTA	AACTGAAAAA	CAGTGGAAT	TGTAATGTT	TATACTGGCC	240
ATTCTATATG	AACTAATATA	TATTTATAAT	TTTTAATATT	TATACATGGT	ATATTTTCCC	300
ACAATAAAGA	TGAAATTAA	AGCAGTTGGT	CTCGAG			336

## (2) INFORMATION FOR SEQ ID NO:1090:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 559 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GAATTCGGCC	TTCATGCCTA	CAGAGGCGAA	AGGAGAGTCC	AGTGAGAAAC	CAGCCATTGT	60
CTTCATGTAC	AGGTGCGACC	CTGCTCAAGG	CCAGCTCAGT	GTGGATCAGA	GCAAGGCTAG	120
GACAGACCAG	GCAGCAGTCA	TGGAGAAGGG	TAGAGCAGAG	AATGCATTAC	TACAGGACTC	180
AGAGAAGAAG	AGGAGTCATT	CTTCTCCATC	ACAGATTCCT	AAAAAGATTC	TCAGTCACAT	240
GACCCATGAA	GTAACAGAGG	ATTTTCTCTC	TCGGGATCCA	AGAACTGTTG	TTGGGAAGCA	300
AGATGGCAAG	GGCTGCACTT	CAGTCACAAC	AGCATTGTCC	CTACCTGAAC	TGGAAAGGGA	360
AGATGGAAAA	GAAGACATTT	CAGATCCTAT	GGACCCGAAC	CCTTGTAGTG	CAACATACAG	420
CAACTTAGGG	CAATCTAGAG	CAGCCATGAT	ACCTCCCAAG	CAGCCACGAC	AGCCCAAGGG	480
AGCTGTGGAC	GATGCCATCG	CCTTTGGAGG	GAAAAACAGAC	CAAGAAGCAC	CCAATGCTTC	540
CCAACCTACA	CACTCGAG					559

## (2) INFORMATION FOR SEQ ID NO:1091:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 398 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ATTCTTATGT	GTGTTTCAGG	ACGACTGGGT	TTGGATTACG	60
------------	------------	------------	------------	------------	------------	----

```

AAGAGGATTA TTATACACCA CAAAAGGTAA AATCAGAAGC AATATTTC TAAACCTAT 120
CTTAAGTCGC ACAGACTCCA TAATATGTCC TCTTCCTTG GCTCTGTTGT ATCAAGGTGT 180
TTATTTCGA AGTGTTCCT GTTTGGGAGA CTGACAATTT AGGATTCCTG ATTTAGCACC 240
CTGTGGTCTT GTCATCTGAC CAAATCACAG AAAATTGAGA AAGTGGATAC AGCGACTGTG 300
GACATTGTGA AGTCACATCT TACTCAGGGA TGACAGCTAA AATCAGCGTG TACAGCAGAA 360
AAGTCACATA TAGCTACAAA TACCCTGGAA AACTCGAG 398

```

## (2) INFORMATION FOR SEQ ID NO:1092:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

```

GAATTCGGCC TTCATGGCCT ACAGAGTTTC TGCAAGTCAG CCATGAAGTC TATGCTCTGC 60
TTCAGGCTCT GAATTCCTTC CTGGCTAAGA ATTTTCATTC CTGAGTGCAA CAGCTTCTTT 120
GCAGCTTTAT AATAAATGGT CTCTGGTTTA TTGTAAATCA TGGCATTAGT ACACATTAGT 180
TTGAAGTTAT CCTTTAGTTC TTCTATGGAC TGATAGTCAT TGTTCCTGAT CTTTTCTTTC 240
ATGGTACTAA AATCCATTGG GTGTTTAATG ATCATGGAGT AGCCAGGAGC AATAAAATCA 300
GTCACAGGAA ATGAAAAGAA AGCACTTGGG TCTTTCTCT GCAATTGTCT CATCAGTTGA 360
TTCAAAGCTT CTGAAGGGG TGTCTGTTCT ACTTCTTCTT GTTTGGCTAA AGAGCTTGTG 420
AGAGGCTTCG CTCGAG 436

```

## (2) INFORMATION FOR SEQ ID NO:1093:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 390 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

```

GGGGCAGGGA GCCTGGCCAG GCCTGAGACA CAGAGGCCCA CTGCGAGGGG GACAGTGGCG 60
GTGGGACTGA CCTGCTGACA GTCACCTCC TTCTGCTGGG ATGAGGTCCA GGAGCCAACT 120
AAAACAATGG CAGAGGAGAC ATCTCTGGTG TTCCCACCAC CCTAGATGAA AATCCACAGC 180
ACAGACCTCT ACCGTGTTTC TTTCCATCC CTAACCACT TCCTTAAAT GTTTGGATTT 240
GCAAGCCAAT TTGGGGCCTG TGGAGCCTGG GGTGGATAG GGCCATGGCT GGTCCCCCAC 300
CATACCTCCC CTCCACATCA CTGACACAGC TGAGCTTGTT ATCCATCTCC CCAAACTTTC 360
TCTTTCTTTG TACTTCTTGT CATCCTCGAG 390

```

## (2) INFORMATION FOR SEQ ID NO:1094:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 559 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

AATTCGGCCT	TCTTGGCCTA	GAGGGATTG	TTAACCAGTG	CCACCACTA	GTTCTGGAAA	60
CGGAGGATGC	GGTGGTAGAT	GTCCAGTTCT	GTCAGCTCAC	GTTGTGGAT	GCAGATCTGG	120
TGCTCCTTCT	GCGTCTGCAC	GATCCGGGCC	TGCACTTCTT	GCCACGTGCA	ATACGGAAGG	180
GCAGACATAG	GGATGCGCAG	AGCGTGCAGG	TAGAAGGAGT	GGATCTCCCA	GTAGCAGCAA	240
ATGTTATAGA	TGAAC TTGAT	AAGCCGGTGG	ATCCAGAAGA	CACCAGCAAT	GACCAGGATG	300
GTGATAAGGG	AGCCATTTTC	CTGAATCCTG	GCACTACAGA	CTTGAGCAGG	CAAAAAGGCG	360
TCTGGCAGAG	TGACCTTGAC	GGGTT CAGTA	GGGTGAAGAC	TGTGGTTCAC	CATCTTGTG	420
GCAAATAGGA	TGTCATAGTC	CACGCAGCTG	ACCAGGAAGG	TAGTGAAGGC	AACCACAAAG	480
AGGAACTGCA	TGAGCTCAAA	GATCTCCCCG	ATGAGCATAC	ATGTGAAGCC	ATTCTTCTGG	540
TGCAGATTAT	AAACTCGAG					559

## (2) INFORMATION FOR SEQ ID NO:1095:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

GAATTCGGCC	TTCATGGCCT	AGGTTTGGAA	AGTAAGACAT	ACTGGCTTCC	TTTATT CACA	60
TTAGCATTTT	CCTATTATTT	TGGAACCAAC	AATTCCATGT	TCATTGAATT	TCCTTTTTTT	120
TTTTTTTTTT	AAAGACTGCA	AATTTTGGCT	GGGCACAGTG	GCTTGACTCT	GTAATCCTAG	180
GTACTTAAGA	GGCTAAAGCA	TGAGGATCAC	TTGAGGGACT	CGAG		224

## (2) INFORMATION FOR SEQ ID NO:1096:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

GAATTCGGCC	TTCATGGCCT	AGTTCTCTCT	GATTTGGTTT	GTTCTGTCTC	AGGCTTCTGT	60
GGCAGGACTG	GCCCAGGGAG	GAGGAAGCCA	GCAGCACACC	TGGGGAATGG	GGTCCCGGCC	120
GGGAGGCTTG	GCCTCTGGGC	GACCTCGTCC	TGTTTTGTTT	GTTTGTTTGT	TTGTTTTTTT	180
AAAGGTAAAC	CTCCTGGGCC	GCAGATGGCA	AAGGGAGTGC	CTGGGCCTGG	TGACCCAGGG	240
CTGGATCCAC	CCCTGCGGAG	CCCTGGGCCA	GGCAGGTGTC	TGCTGCTCAC	CTGGCTCTGG	300
AGGGCTGCCC	TGCAGCTGGG	CCTGGGGACA	GGTCGGCTGT	GGGGCAGCTC	AGTACCCTCC	360
CTGAGGCTCA	CGGTGGCTCC	GAGCATGAGC	TCTGCCTCCT	GGGCGAGACC	CAGCAGTGGA	420
CAGCACGGTC	CTCACACCCA	GCTCCCTGCA	CACCCAGGCC	AGCCACCCCT	CCCCTCGTGT	480
CACAGGCACG	CAGATGCGCT	CACACGTACA	CACACACAAA	TGCAACGCCT	CGAG	534

## (2) INFORMATION FOR SEQ ID NO:1097:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 606 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	ACTTTATTGG	TGGACATTAA	GAATGGAGGA	ATGTTTCAAC	60
AAAGGAACAA	TCAACAGTAT	CAAATACTG	CAGAGGGGTC	AATTTGGGGA	CTAAGAGGGG	120
AGCCACTGGA	TTTGACAAC	AGGAGATAAA	TTTTAGTGCA	ACGATGAAGG	CAGAATCCAG	180
AGTATAATGA	GCTCAGTGAA	AAAAGGTGAA	NACATGTAGC	TTATTCTCTC	AAGAACTAG	240
GCTATGATAA	ACTGGCAGAG	GCTCTAAGAG	TGGGAGGTGA	GTGTTTTTCT	CCTTCATGTA	300
AATATATTTA	CCTTTTAAAC	ACTAGGCCCA	ATTTTATATC	CTATTTCATT	TAACTTTATG	360
AACATATTTA	TGTATGTATG	CATGTATGTA	TGTATCTCAT	GTGATGTTTT	AGACACTGAA	420
AAATAACTCA	TTTCTATTAT	AAAACGTATA	TCTTTAGATG	TTTCAGAAGC	AACTTCCTAA	480
AAGGAGGTAG	CAGTAATGGA	GCTATGTCTA	TCATTCTTTC	CCATCAACCC	CCTTGATGGA	540
GATGTAAACA	TGTGTCCATC	AAGCCTTTAA	TTTTTACNTC	TTATCTTCAG	GGCTCTGCCG	600
CTCGAG						606

## (2) INFORMATION FOR SEQ ID NO:1098:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	AGCAGAACAT	GGATATTTTT	CCTTTAATAT	TTAGTACTTG	60
GGCTATCATG	AAACAAGGTT	AGCATAACCA	TCCAAAACCC	CAAGTGCTCC	AAAATCCAAA	120
ACTTTTTTAA	CACCAACACG	ATGCCCAAAG	TGGAAGATTC	CATACTTGAC	CTCATGTGAT	180
GGGTCTAAGT	CAAATGTAG	GCAAACCTTT	CACGCACAAA	ATTACTTAA	ATATTCTACT	240
GAGCCAGGCA	TAGTGGTTCA	TGCCTATAAT	CCCAGCACTT	TGGGAGGCTG	AGATGCCAAT	300
TGCTCGAG						308

## (2) INFORMATION FOR SEQ ID NO:1099:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCGGCC	TTCATGGATG	ACCGCAGCAG	GCTGGTCAAG	CAGATGGAGG	ACAAGGTGTC	60
TCAACTGGAG	ATGGAAGTGG	AAGAAGAGAG	AAACAACCTCA	GATTTGCTGT	CTGAGAGGAT	120
CAGTAGGAGC	AGGGAACAGA	TGGAGCAGTT	GAGGAATGAG	CTACTTCAGG	AGAGAGCTGC	180
GAGACAAGAC	TTGGAGTGCG	ACAAGATTTT	CCTGGAGAGG	CAGAACAAGG	ACTTAAAGAG	240
CCGGATTATC	CACCTGGAAG	GTTCTTACAG	GTCCAGCAAA	GAGGGGCTGG	TTGTGCAGAT	300
GGAGGCCAGG	ATCGCGGAGC	TGGAGGACCG	CCTGGAGAGT	GAGGAGAGGG	ATCGGGCCAA	360
TCTTCAGCTC	AGCAACCGGC	GGCTGGAGCG	GAAAGTGAAG	GAGCTGGTGA	TGCAGGTGGA	420
TGATGAGCAC	CTGTCATTGA	CTGATCAGAA	GGACCAGCTG	AGCTTGCCTT	TGAAACCCCT	480
CGAG						484

## (2) INFORMATION FOR SEQ ID NO:1100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```
GCAGATTGAG GACCTCCAGA AATCTTTACA GGAACAAGGT TCCAAGTCTG AAGGCGAAAG      60
TTCCCAGCAA ATTAAAGCAG AAGTTGGAAG CTCATATGGA AAAACTCACA GAGGTCCATG      120
AAGAATTACA GAAGAAACAA GAACTCATTG AAGATCTTCA GCCAGATATA AATCAAAATG      180
TACAAAAGAT CAATGAACTT GAAGCTGCTC TTCAGAAGAA AGATGAAGAT ATGAAAGCAA      240
TGGAGGAAAG ATATAAAATG TACTTGGAGA AAGCCAGAAA TGTAATAAAA ACTTTGGATC      300
CCAAGTTAAA TCCAGCATCA GCTGAAATAA TGCTACTAAG AAAGCAGTTG GCAGAGAAAG      360
AGAGAAGAAT TGAGATTCTG GAGAGTGAAT GCAAAGTAGC AAAATTCCGT GATTATGAAG      420
AAAAACTCGA G                                     431
```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 557 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```
GAATTCGGCC TTCATGGCCT ACTGGGAATC TCTCAGCAGC TTTTGGCCAA ACAGATGGGC      60
CAGGAGCCGC GGAACCAGGC TGAGGAATGT TGCCTCACGA TCTCTCATAT CCATTCCCTGG      120
CACCCACCAG CCCAGGGAAT GCCTCTACCA GTTGTACGCG AGAGGCTTAC ACAGCATCTT      180
AAATAAAAGG GATTATTGAA CCAAGAGGCC AGGGACTGAT GGAAATGCCC ACCTTGCTGG      240
CTCATTGAAA AAGTTTGGCA AGGTTGTCAG GAGACATGAA TTAGATGGGC TTGGGTCTTG      300
TGCCCTTTGC TAAACCAAGT GCTGTATTGG GAAAGAGACG GGGAGAGAAG TGTGGAGAT      360
GCTCTTTAGT CAGGCTGAG TCACTTGCCC AACCCTGGAG TTGGAGTTGG GGATGGAGCC      420
AGGATCTCCA AACCACATGC CCCTAGAGTT TCAGGGAAAA TATGGATTGT GAATTGAAGA      480
TGGGGGGTGA TGTAAGGCAG ACAAGGACAG AAAATCCCCTC TTCCAGCTGT GATTGGCTG      540
TGAGTTTGGC GCTCGAG                                     557
```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 577 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```
GAATTCGGCC TTCATGGCCT AGTTTTTCTA GAGTGAATTA TAGTATTGAC GTGAATCCCA      60
CTGTGGTATA GATTCCATAA TATGCTTGAA TATTATGATA TAGCCATTTA ATAACATTGA      120
TTTCATTCTG TTAAATGAAT TTGGAAATAT GCACTGAAAG AAATGTAAAA CATTTAGAAT      180
AGCTCGTGTT ATGGAAAAAA GTGCACTGAA TTTATTAGAC AAACCTACGA ATGCTTAACT      240
TCTTTACACA GCATAGGTGA AAATCATATT TGGGCTATTG TATACTATGA ACAATTGTA      300
AATGTCTTAA TTGATGTAA ATAACCTCTG AACAAGAGAA AATGTTTTTA ACTTAGAGTA      360
GCCCTAAAT ATGGATGTGC TTATATAATC GCTTAGTTTT GGAAGTGTAT CTGAGTAACA      420
```

GAGGACAGCT GTTTTAAAC CCTCTTCTGC AAGTTTGTG ACCTACATGG GCTAATATGG 480  
 ATACTAAAAA TACTACATTG ATCTAAGAAG AAACAGCCT TGTGGAGTAT ATAGATGCTT 540  
 TTCATTATAC ACACAAAAAT CCCTGAGTGA CCTCGAG 577

## (2) INFORMATION FOR SEQ ID NO:1103:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 298 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

GAATTCGGCC TTCATGGCCT ACATGGACCT CCTGCACAAG AACATGAAAC ACCTGTGGTT 60  
 CTTCCTCCTG CTGGTGGCAG CTCCCAGATG GGCCCTGTCC CAGGTGCAGC TGCAGGAGTC 120  
 GGGCCCAGGG CTGGTGAAGC CTTCGGAGAC CCTGTCCCTC ACCTGCACTG TCTCTGGTGC 180  
 CTCATCAGT AGTGGTGGTT ACTACTGGAG TTGGATTCTG CACCACCCAG GGAAGGGACT 240  
 GGAGTGGATT GGGCGAATCT CTCACAGCGG GCACACCAAC TACGACCCCT CCCTCGAG 298

## (2) INFORMATION FOR SEQ ID NO:1104:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 306 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

GAATTCGGCC AAAGAGGCCT AGTCATCTTC AATATCTCTC TCTCTCATCC CTTTATTAAA 60  
 TCATTCACCA AGTTTGGACA GTTTTCCTTT GCAATGTGTC TCCAAATGGT CATCCTCTTC 120  
 TCCTTTTTC AATTAGGATT CTGTTTTCT TTAATCATTC GTAAACAAG TTTGGGAAAT 180  
 GCTAGTTACG CAGTTAATGG TGTAGTTACC GCAGGACTTG ACAAACCTC TAATGAAAGA 240  
 ATAAACATT TGCTATATTT GTTTGATCAG AGAACTTTT TTCCATCTCA GGGGATCATT 300  
 CTCGAG 306

## (2) INFORMATION FOR SEQ ID NO:1105:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 535 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGTCT AAATGAAATG ATTGCACTGC 60  
 ACATACTTCT AAAACTGTCC TGCATTGTA TAGCTTCCAT TTCAATGGCGC TTCTTCTGGA 120  
 TGTCAAGCAC TAAGTCGGGC GCTTTATCT GTAGTTCTCC TAGCAATCTG GTGAGCTCCA 180  
 CTTACAGAT AAGGAAATCG AGGCCAAGGA CAGCTAAAGA AGCGAGGTGC GCAAGGTGCC 240  
 CAGGTCCGAA GTGTTTCCGC TGCTTTCAGA CTGCAGTCCC AGGGCTCAGG AGTCCATGCT 300  
 TTCTGCGTAT CTTACGCTG GCCACGGATC ACCTCATCAT TAGATGTCGA AGTTGAACAA 360

```

GTGGTGTTCACATTCGGACG TGTGTTAGGT AGAAGTGTGT GTGCACCTGC GTGTGCGTGT 420
ATGTTCCACA CGCTGATGCA GGAGGTATAC GCACAGATAT AATGTCTTT TAGAAGATTG 480
ACTATCACTA ATTTTGAAAA ATTTCCTGAA TGACCTTTCC GNCCCGGCGC TCGAG 535

```

## (2) INFORMATION FOR SEQ ID NO:1106:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC NAAGAGGCCT AGAAAAAATT AAAAAGGGAT ACAGACGAGC TGCNAGCTAT 60
GGAACATAGA TATTAACCCC CAAAGAGTCN TAACCACAGC TGA CTCTTAG CTTCACAAGC 120
AGNCCTCNGA ANGTGGTAGC TTGTTTTAAG CAGAGGCCAT GCAGAACCCA TGAAACCAAA 180
GGACAGAGCC AGTAGGGCTG GAGTCTGACC AGAAAGTTCC ATGCCCTCTG CTTTCTGCAT 240
GGAAATGAC CTGGTAGGTT TTAACCTATC CAAGACTACA GAGGATTTCA GAATTTCACT 300
TTGAGGTATG CCTCAAACA TTCCAGCCTT GATCATGAAA GAAAGAAGTG ATCAAAATAC 360
CATATGTCAC AATGGAAAAC CCAAGCGGCC CCAGAGCTCT TCTTCAGTAA TGAGATTTAG 420
TTGATCTGNA CAGTTATTTA TGCATTGAGG TCATATTTTG GCCAATCTTT TGCTTACAGC 480
TGTCGCCAAA TAAAGCCTTC TGTNTTAGCA TTTCTTTTAC CAAAATCAGG TTGAGAGATG 540
GTTCTTTGAG AGGACTGTTT TGTGAGGAA TACAGGGAAT CTCGAG 586

```

## (2) INFORMATION FOR SEQ ID NO:1107:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```

GAATTCGGCC AAAGAGGCCT AGGACTTAAA AGAACAGCTA GAAAAGATGA AAGGTGACTT 60
AGAAAGTAAA AATGAAGAAA TACTACATCT GAACCTAAAA TTGGACATGC AGAACAGCCA 120
GACTGCTGTC AGCCTCAGAG AACTTGAGGA AGAGAACACG AGCTTGAAGG TCATATATAC 180
CAGAAGTTCT GAGATTGAAG AGCTGAAAGC CACTATTGAA AATCTGCAAG AGAATCAGAA 240
ACGATTACAA AAGGAGAAAAG CAGAGGAAAT TGAACAATC CATGAAGTCA TTGAGAAGCT 300
GCAGCAGGAG CTGTCCCTCA TGGGGCCTGT GGTGCACGAA GTCAGCGACA GTCAGGCTGG 360
CAGTCTGCAG AGCGAGCTGC TCTGCTCCCA GGCCGGGGGC CCTCGTGGGC AGGCCCTACA 420
GGGCGAGCTC GAG 433

```

## (2) INFORMATION FOR SEQ ID NO:1108:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

GAATTCGGCC AAAGAGGCCT ACGTGAATAT TTTTCCATCT GTGTTTCATTG ATGTTAACAA	60
TAAAAATCTT GTTTATGTGT ATAAGCCTAA CATATGCCTG TGGGTCTTAT AACTGCCTGT	120
TCAAACCTCA TGGGATACCA AAAATGTATC TGCTTACTTT GGGGGTCTAA CTTTAATTCG	180
GTACATATAA ACATCTCTGG AAAAAAATGT AGTTTTTTTC TCCCCCTGC TGTTTTCCCC	240
AGGCTTTTCT CTTTGACCTG GCCACGGTTC CCATAGACTA CAAGACGACT TAGAGACATT	300
GCTGTGACAT CTCGAG	316

## (2) INFORMATION FOR SEQ ID NO:1109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

GAATTCGGCC AAAGAGGCCT ACTAACATTT TCCTAATCTT ATGTGTTTGG CTCCTCTCAT	60
TTACTCCCCA CAGCAGCCAC ATGAAGTTGG AATTCGAAC TCTTATTTAG GTATGCAAAA	120
GGGTACCACT TCTCTTAAAG GCTTTAGTTC AGGAGTGGTG TTAATGTATT AATGTGTTGG	180
GGCGCGAGAG GAAGGCGGTG CTTATTTCTGA ATCATGGTAG GTAAAGATAA TTTCAACTCT	240
GACACTTCCA CTAATAAATT TTCGCATCTA GGGAAAATGA CGTAAGCTTC CTAGATCACA	300
GATTTGTTTT CATCCAAAAC CCGAAGTCTG GTTTTGAAAT CACGCTCTTG ATACAAAGGT	360
GGCTCGAG	368

## (2) INFORMATION FOR SEQ ID NO:1110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC AAAGAGGCCT ATCCGGGGGG AGTAAGGTGA GGACAAGGAA CAGAAAGGCG	60
TGAGGTGATG GAAGGAAGTC CGGGAGAACC ATATGAAGGA GCAGGAGGAG AGGAAGAAAC	120
TTTTTTTCCT TCTTTTCCAG GAGTAGCTGG AAATTAAGAT CGGGTTCCTT TTCTGCCAGC	180
TTGGAAGGGC AACCCCATGA CTGATTGCGA TTCTGAGGAT GTCTATGCAA AGTTGGATTC	240
TTGTTACAGT GTATCCAATC TGAAGTATTG CACATCTGAA CTGGGACTGT TAACACTGAT	300
GCCAATACAG TGTGGGGTGC CAGAAAGTGT CTGCTGATAT TTGTGGAAA AAAATCTATT	360
TTGTTTACCT ACTGTATCAA AGGGGAGGAA CTCGAG	396

## (2) INFORMATION FOR SEQ ID NO:1111:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:



GAATTCGGCC	AAAGAGGCNT	AGATTGTTTT	CATTAGCAAA	CTCATARITA	TCCTTTTCCT	60
TAACACTTCC	AGTTGAGAAA	ACAAGTATTT	GTTAATGACC	AGTAATAATC	TTGATCCAGG	120
GTAGGCAAAA	TTTTTCTTCC	AGGGCCAGAT	TGATACTTTA	GGCTTTGCAG	GCCACGGGGT	180
CTCTGGCAAC	CCCCAGCTCT	GCTGTTGTAG	CACAAAAGCA	GCCACAGGCA	CAAGTAAACA	240
CATGGGTGTG	TCTCTGTACC	AATAAAACTT	TATTTACAGA	AACACAGGGC	AGATGACTGT	300
CTGGCCCCTG	GTCTTGTCTG	CATTTTGTGG	TGGTGAACAA	AAGAACTGT	TCAGATCATT	360
ACATTTACAG	TCATTACCAA	AAATAGAATC	TTACAGTAG	TTGTACTGTT	GATGAAGCAA	420
GCTCGAG						427

## (2) INFORMATION FOR SEQ ID NO:1112:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTCGGCC	AAAGAGGCCT	AGGTTATAAT	AGCAGCTTAC	TTTGATAAG	CGTACTAACT	60
GGTACATAGT	AAATACATAC	TGTGCATGCA	TTATGTCATT	TATATCCACA	CAGTCACCTT	120
CAAATTCAGT	ACAATTTGTA	TTCCCGTTTT	ACAGATGAGA	AAGCATATTT	TGGTGAAGTC	180
AACCAAGGTT	ACATGACTAG	TAAATTTTAA	ATGAGATTTA	ATTCAGTAC	TTACTAACCA	240
TTATGCATTG	CTAAATTTGA	ACATTACTTT	AAAATATAAC	TTCTAAAGTG	TTCATATTAG	300
AAACCTATAA	ATATACATAG	ATTTGTCTCC	TCTCTNACGA	AGAACACATG	AAGGAAAGAA	360
AGATATTAAT	TTGGTGGCTT	ATCATATGCC	AGACATAGAT	ATAGATGCTT	GTATGTATGG	420
CATTTAATCC	TTATCTGTGA	GGTAGGTCTT	TTTATGCCTT	TCTATAGATT	TAAATTAAAG	480
GTTCAAGTTA	GTAAGTTGCT	CGAG				504

## (2) INFORMATION FOR SEQ ID NO:1113:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

GAATTCGGCC	AAAGAGNNCT	AGAGGGATAT	AGAAACTTAA	CAGCAGTGGC	TGACATTTTT	60
GCTTATTTGT	TAGGTATTGG	TGGTGGTGTT	AATCGGGTAC	GCATATGCTT	TCCTTAGGAT	120
TTGCATTGTC	TGTTCCCTGT	GTCTAGAACG	CTATTCCTTA	GATAAATCTT	CATTCCCTTAC	180
CTCCTTAAAA	TGTTTTCTCA	TCTATCACCT	TCTTAAGTCT	GTACTGATCA	CCCTACTTAA	240
AATTATAACT	GCCCCTCTTT	GCTTGCACTT	CTAAGCTTCC	TTACCCTAGT	CTGTTTAGCA	300
GTTACCTCCT	TGAAACATGC	TCTGTAGAAT	TTACTTATTA	TGACTATTGT	CTCTCTTACT	360
ACCCTCGAG						369

## (2) INFORMATION FOR SEQ ID NO:1114:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 89 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

GAATTCGGCC AAAGAGGCCT AGTTAAAAAT AGAATTGAG ATATTTAATT TTCTGCTCTT	60
TTTAAGTTAT GAAAACGTAT TTAAGTCGAG	89

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

GAATTCGCCA AGAGCCTATT AATTGTAA CTTAATATA GTGTAACTG AATAAAAGTA	60
AATAATTATT ATTAGAATGG TAACTAAGTC ATTAATTTT TTNGCAGAAC TGAACTTGT	120
ATGTTATTAG TTTATTTTCT TAGACCAGTG TAATAATGGA CTGTAAATAG AAAAATAAAT	180
GTCACTTTAC AGTTAGATGT ATCAGAGTCG TTTCAGGAGA ATTTTTCCTA TATTGTTACC	240
TTGATTCATT GTTTAAATTT GGTAGGATTT GTATAGATAT AGGATAGTGT TTTATTTATA	300
CTTTATCATA AGCCATAATC ATTTTAAGAA TACTTTATTG GATAGATTTT AGTACTTTTT	360
AAATTCTAAA GTTCTATTTT TCTTTTCACT TCCCCTTCCT TCCCCTTATA AGATCATTTT	420
CATGTCCTTG TTGGTGATCT CAGCCAGAA ATTACAACTG AAGATATAAA AGCTGCTTTT	480
GCACCAAGTC TCGAG	495

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTCGGCC AAAGAGGCCT AGGGAAAAGA AGGGCTTTGG GGACCTGCCC ACTTCAAAAA	60
CAGTTTTTCT CATCCTTTGC CTTGGGCTCC AAACCCAGCT TGGTGTTTTC CTAAGGGAGC	120
TACAAATTCT GGAGCATCCC ATGAGGATGA TTTGCTGGCC TCGGTCATTA GGGGGAAAGG	180
ATGTTCTCAG AAAACAGCC CTGCAGCTG GTCAGCAGAG ATCTTGAGGT CGTGGCCACG	240
ACTGGACTTG GTGCAGAGCT GAACCCGAGA CTCCAGCTGC TCGCTGAGTT CGTCCAGAGC	300
CCCGGTGCAG GACTCCAGGC TCTCGGCCAG TTTCTGAATC TTGGCCTTCA GCACGGCCTG	360
GCTAACCTTG GTGTCCCCCT CCGCCCGCCT GGGGATGAGG AAGCCACGTG AGCCAAAGAA	420
GACGATGAAG TAGACAGAAT TGTACAGGGC GATGGAGGCG TTCCTCCCGC ACTGCAGCAG	480
CTGGCGGTCC CCGCAGCCCT GCCAGCGGCA GAAAACTCG AG	522

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAATTCGGCC	AAAGAGGCCT	AAAAATATTT	TACTTGTTC	ATCCACAGTT	CTCTACAGAA	60
AGAACCAATG	AACCCAATAG	GAACAAATTC	TCTGTGGAAA	ACAAAGCATA	GCTGTAGTAG	120
ATACGAATCC	AATCACAGAG	GAAACAGGAA	GAGAAAAACA	TCCAAGACTA	TAGTGAAGAA	180
TGGAATGGT	CTGTTTTCGT	GATATTCGTA	TGATTAAGAT	GCAAATTTT	TCTTAGGAAA	240
ATGTGATTGT	TAACTAGCAT	TCTGTTTAC	ATGTTGACAT	TTCTAACACA	CACACCACTG	300
ATTTGAACTT	CAAAATTTAT	TTTCTGATTA	TATATGCTAG	GTCATGCTCG	AG	352

## (2) INFORMATION FOR SEQ ID NO:1118:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 481 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

GAATTCGGCC	AAAGAGGCCT	AGTGCCCACT	CATTTATGTA	CTGTCTATAG	CTATTTTCAT	60
GCTACAATGG	CAAAGCTAAG	TAACACTCAA	GGCTAAAAT	ATTCACTATA	TGCCCTTTGA	120
AGAAAAAGTT	CACTCAACTC	TGCCCTAAAC	TACAGACCCT	GGCCAAGGTG	GGAGGATCAC	180
TTGAGGCTAG	TAGTTCAAGA	CCAACCTGAC	TCTGTCTCTG	ACTCTGTCTC	TACCAAAAAA	240
AATTAGCTGG	GCGTTGGGCT	TATCCCTGTA	ATCCCAGCTA	CTCAGGAGTC	TGAGGCAAGA	300
GGATCACTTG	AGCCCAGAAG	TTCAAGGACA	CAGTGAGCTA	TGATTGCACC	ACTATACCCC	360
AGCCTGGGCA	ACAGACCAAG	ACCCTGTCTC	TAAAAACATA	AAATAAAAAA	TAAAAAATAA	420
AAATAAATAA	TAAAGAAAAA	AGAAACAGAA	TTAAAGAAAT	TCTTTTGCTC	AAAGTCTCGA	480
G						481

## (2) INFORMATION FOR SEQ ID NO:1119:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCGGCC	AAAGAGGCCT	AAGTTGTGTC	AGTGTCTCTC	CTAAGGTAGT	AAATATAATT	60
GACTTATTCT	GAACCCATTC	TATTTTGAAT	CTCCCTTTTC	CTCTCACAAT	ACTTGAACAT	120
TTTAATCTTT	TGGAATATTG	TCTTCTTTTG	TTATAACTAT	TCATTTT TAG	CTTTTGTCTC	180
CAGTGCATGA	TCTCATATTT	TTGCTTTTAT	TTTTAGTATA	AGAACATTTA	TAAATCATA	240
TTTTTGTAC	TGCAATTGTT	TTATTGTTG	TGTGGCAAAT	GAGAAATCCT	TTATTATTG	300
TGCTGTATCT	CGAG					314

## (2) INFORMATION FOR SEQ ID NO:1120:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 199 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

GAATTCGGCC TTCATGGCCT ACCAGATACT GTTTTTTTAA TACATATTCA AAAGAAAGCT	60
ATTAACCCTG ACAGACATTT CTCAGTCTGT GCTTTTTTCT ATTTTATCAT TTAAAGTAC	120
TTAAGATAGA AAGATGAAAA AGCATTTGTT GGCTACTTGG TTAGCTTCAC AAATTTTCCC	180
CCTTCCTACG CAGCTCGAG	199

## (2) INFORMATION FOR SEQ ID NO:1121:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

GAATTCGGCC TTCATGGCCT AGTAGCATAT TAACAGTGTA ATAAAAATA AAAACAACT	60
CTAGTATCCA GAGGATCACA TGCTGACCAG ACCCTGTGTA GAAAGTGCCG AAGAGCATCA	120
AGGAAATGGA AACGTTGGAA TTCCATCCGT GCTTGTGGCT TTCCTTAAAC TTTTGTATG	180
GAAAATTTCA AATATACCCC GAAGTGGAGA TTGGCTTAAA TCAGCCCCAC GTGCCCATCA	240
CTCGGCTCCA GTCATTATCC AGTGTGGTTC CTCTGATCTT CACCACCCCC TCGAG	295

## (2) INFORMATION FOR SEQ ID NO:1122:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC TTCATGGCCT AACGGAAGCG TCTCCTCATT GATGGAGATG GTGCTGGAGA	60
TGATCGGAGA ATTAATCTGC TAGTGAAGAG TTTCATTAAA TGGTGCAACT CTGGGTCCCA	120
GGAAGAGGGA TATAGCCAGT ACCAACGTAT GCTGAGCAGC CTGTCTCAAT GTGAATTTTC	180
AATGGGCAAA ACTTTACTAG TATATGATAT GAATCTCAGA GAAATGGAAA ATTATGAAAA	240
AATTTACAAG GAAATAGAAT GTAGCATAGC TGGAGCACAT GAAAAAATTG CTGAGTGCAA	300
AAAGCAAATT CTTCAAGCAA AACGAATACG AAAAAATCGC CAAGAATATG ATGCTTTGGC	360
AAAAGTGATT CAGCACCATC CAGACAGGCA TGAGACACAG GGAACTCGAG	410

## (2) INFORMATION FOR SEQ ID NO:1123:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

GAATTCGGCC AAAGAGGCCT ACCTTTCTTT CTCCTTCC TCCTCCCATG TCCCTCTCTC	60
---	----

CTCCCTCCCA	CTCTCACCC	TTCTCCATCC	CTCCTCCCTC	TTTTCTTTTG	TACTTTCCAG	120
CTGGAGCAGC	AGCAGCAGCT	GGGCTGAAT	CAATGATTGA	CTTCCCCACG	ACCTCCCCTT	180
CTCTTTTGCC	AATGATATCT	CTTTGCCCTT	CCAGTCATCT	TTTAATTTTA	TCGTGTATGG	240
TTTTGCTTCT	CCTTCCTCCT	CCTCCTCTCT	TCCCTCTTTC	TCCCCCTCT	CCCCCACC GA	300
CAGTCGAG						308

## (2) INFORMATION FOR SEQ ID NO:1124:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTCGGCC	TTCATGGCCT	ACAATTTTGC	CATGGTTCTG	CTCATTTTTC	CTGCAATTCT	60
CAGCATGGAT	TTATATCGAC	GCGAGGACAG	GAGACTGGAT	ATTTTCTGCT	GTTTTACAAG	120
CCCCTGCGTC	AGCAGAGTGA	TTCAGGTTGA	ACCTCAGGCC	TACACCGACA	CACACGACAA	180
TACCCGCTAC	AGCCCCCAC	CTCCCTACAG	CAGCCACAGC	TTTGCCCATG	AAACGCAGAT	240
TACCATGCAG	TCCACTGTCC	AGCTCCGCAC	GGAGTACGAC	CCCCACACGC	ACGTGTACTA	300
CACCACCGCT	GAGCCGCGCT	CCGAGATCTC	TGTGCAGCCC	GTCACCGTGA	CACAGGACAC	360
CCTCAGCTGC	CAGAGCCCAG	AGAGCACCAG	CTCCACAAGG	GACCTGCTCT	CCCAGTTCTC	420
CGACTCCAGC	CTCCACTGCC	TCGAG				445

## (2) INFORMATION FOR SEQ ID NO:1125:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

GAATTGCCTT	CATGGCCTAC	ACCAGCCTAT	TCTCTGCTTC	TGTGAGTTTG	ACTCTTTTTT	60
TTTTTATGAG	ACAGAGTCTC	ACTCTATCTC	CCAGGCTGGA	GTGCAGTGGC	ACAATCTCGG	120
CTCACTGCAA	CCACCACCTC	CCAGGTTCAA	GCAGTTCTCC	TGCCTCAGCC	TCCCAAGTAG	180
CTGGAAATAT	AGGTGTGCCC	CACCACGACT	GGCTAATTTT	TGTATTTTTA	GTAGAGACAG	240
GGTTTCACCA	TGTTGGCCAG	GCTGGTCTCG	AACTCCAGGC	CTCATGTAAT	CCGCCACCT	300
TGGCCACACT	CGAG					314

## (2) INFORMATION FOR SEQ ID NO:1126:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

GAATTCGGCC	TTCATGGCCT	ACAGCCCCC	GCCCCGCTG	CTGCCCAGGA	ATACTTTCTC	60
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```

CAGGAAGGCT TTCAAGCTGA AGAAGCCCTC CAAATACTGC AGCTGGAAAT GTGCTGCCCT 120
CTCCGCCATT GCCGCGGCC TCCTCTTGGC TATTTTGCTG GCGTATTTC TAGCAATGCA 180
TCTGCTCGGA CTCAATTGGC AACTCCAGCC TGCAGATGGG CACACCTTTA ACAATGGAT 240
AAGGACCGGC TTACCAGGAA ACGATGATGT GGCAACAATG CCATCTGGAG GCAAAGTGCC 300
CTGGTCGTTG AAAACAGGC AACTCGAG 328

```

## (2) INFORMATION FOR SEQ ID NO:1127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC TTCATGGCCT AGTGAGGCTC CATTATTTTC ATTTTAAACA AGTTTCAAAA 60
TGTGGCTGCT GCTGTTGCTG GTGGTCCGGA GCCTGCAGAC AGGGGGATT GCCTGGGAAG 120
GAGAAGTAGA AAACAACGTG TACAGCCAGG CTACAGGGGT GGTCCCCCAG CACAAGTATC 180
ACCCACAGC AGGCAGCTAT CAGCTTCAAT TTGCCCTGCA GCAACTTGAA CAACAAAAC 240
TTCAGTCCCG GCAGCTCCTG GACCAGAGTC GAGCCCGGCA CCAGGCAATC TTTGGCAGCC 300
AGACACTACC TAACTCCAAT TTATGGACAA TGAATAATGG TGCAGGTTGT AGAATTTCCA 360
GTGCCACAGC TAGTGGCCAG AAGCCAACCA CTCTGCCACA AAAAGTGGTA CCACCTCCAA 420
GTCTTGCGC CTCCCTGGTT CCCAAACCCC CACCGCTCGA G 461

```

## (2) INFORMATION FOR SEQ ID NO:1128:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GAATTCGGCC TTCATGGCCT AGAATTATCA TGGCATCTGT AACACACATG CCTGTGCTAT 60
ATTCTCACAA TTTTGTTTCA GTTGTGCATA TTAAATATG GAGCTCCATA TTTTTCCT 120
TCCTAGTTGA TCACAGTTGA CTGGGTTGTC TTTTCTGTCA CCTGTTAGTT TTGAAGAGAT 180
GTCTCATATG TAGTGATGTT AGGTATGATG CATTGAGCCA TAGTAAATAC CTGGTACTGT 240
CTCTCAAAAA AAGCCTTTAG CTTTTTTGTA AAGAGGACAA CAGAAAACAC ACCAAAAAAG 300
CAGAAAAATA TGTGTCGGTG ATAGTGGGAG AAACCTATAA ATCATGGTCA TATGTTACCC 360
CAGAGAAGGC TTACACAAGG TCAGCTACAG TTTACCCAAT AACGCTGTGA TTGTCTGGTT 420
CCTTGGCTTA GAAAGCTTAG TCTCTGCCAA GCGGCCTCGA G 461

```

## (2) INFORMATION FOR SEQ ID NO:1129:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

GAATTCGGCC	TTCATGGCCT	ACAAGAATGA	AGCACTGAAA	AGCGAAGCAG	GCTGCATTCC	60
GAATATCGCC	CCAGACATCT	GCATAGCATA	CAAAGTGCAC	CTAGAGTGTA	GCAGGCTCAT	120
CAACCTCGTG	GACTGGTCAG	AGGCTTTTGC	AACAGTTGTG	ACAGCTGCTG	AAAAAATGGA	180
TGCAAATTCT	GCAACCTCAG	AAGAAATGAA	TGAAATTATC	CATGCTCGGT	TTATTAGAGC	240
TGTTTCTGAA	CTAGAACTTT	TAGGATTAT	AAAACCTACC	AAACAGAAGA	CTGACCATGT	300
GGCAAGACTA	ACATGGGGAG	GCTGCTAGAA	AGCAAATAAG	CAAAGCCAGA	ACTATCACAT	360
TTAGCTTAAG	AGAAAAAGGT	GACCAGTCAT	ATTACATAT	ATTAGAGGAG	CCTGTTTGT	420
TGAGAAGATA	AATGTGTAAC	CCCCATTGAT	GTTTAACCAG	AAAAGTACAT	TGCTAACCCC	480
AAGAGCTCGA	G					491

## (2) INFORMATION FOR SEQ ID NO:1130:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

GAATTCGGCC	TTCATGGCCT	AGGGCAACAG	GAAACTCTTT	ATTATGGTGA	TGAGATCGAC	60
AATCTCCCT	ACTGTAAACC	TTCGCTCCTG	CACACTTCAG	TGTCCTCACT	CTGTAGGGCT	120
CGCTGGCCTG	GGCTTCTGCG	ACCCGCGATC	GTCCAGGAGA	GGGCACTCGG	CGCCCTTCCT	180
GGGGCGCTTC	TGGGGCGGAA	TTTGCTAGGC	CGCCGTAGCA	GCGGTGCCAG	GTGAGAAGCC	240
GAGCCGGCCC	GCTTTTCGTT	CTTTAATTGG	ACTCTTGGCT	AAGACGCTAC	CGACACCCCC	300
TCAGGTGGTG	GAGGAAGAAG	GACAACAGGG	AGAGGTGCGAG	GGCCGAGACG	GCCTCGAG	358

## (2) INFORMATION FOR SEQ ID NO:1131:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

GAATTCGGCC	TTCATGGCCT	AAACATCCTC	CTGCCACTTA	GGAGGAAACA	CCTCCCTATG	60
GTACCATTTA	TGTTTCTCAG	AACCAGCAGA	ATCAGTGCCT	AGCCTGTGCC	CAGCAAATAG	120
TTGGCACTCA	ATAAAGATTT	GCAGAATTTA	ATACAGATCT	TTTCAGCTGT	TCTTAGGGCA	180
TTATAAATGG	AAATCATAAC	GTGGTTCTAG	GTTATCAAAC	CATGGAGTGA	TGTGGAGCTA	240
GGATTGTGAG	TGACCTGCAG	GCCATTATCA	GTGCCTCATC	TGTGCAGACC	TCGAG	295

## (2) INFORMATION FOR SEQ ID NO:1132:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

GAATTCGCC	TTCATGGCCT	AATGAAAAAC	AAAACAAAGA	TGATGAAGCA	GAGTGGCAAG	60
AATTACAACA	AAGCATACAG	CGAAAAGAGA	GAGCTCTATT	GGAAACCAAA	TCAAAAATAA	120
CACATCCTGT	GTATAGCCTT	TACTTTCCTG	AGGTAGAGCT	GAAGTTCCT	GCACCAGGCA	180
AGCCTGGAAA	TTATCAGTAT	ACTGTGTTTC	TGAGATCAGA	CTCCTATATG	GGTTTGGATC	240
AGATTAAACC	ATTGAAGTTG	GAAGTTCATG	AGGCTAAGCC	TGTGCCAGAA	AATCACCAC	300
AGTGGGATAC	AGCAATAGAG	GGGGATGAAG	ACCAGGAGGA	CAGTGAGGGC	TTTGAAGATA	360
GCTTTGAGGA	AGAAGAGGAG	GAAGAAGAAG	ATGATGACTA	AGCAGTACTC	TGAATGGACC	420
ACAGTGTTTG	CACATATTTG	CAATTTTTTG	CTGTTTTGGA	AGTGTATCAT	AAACCAGAAA	480
CAGTACATAA	CAATCTCGAG					500

## (2) INFORMATION FOR SEQ ID NO:1133:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 420 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

GAATTCGGCC	TTCATGGCCT	AGATTATATT	GCATATATTT	TATAGAACAA	GGCAAGCAAA	60
ATATTTTAGT	ATTGCAAAT	CATGTTACTA	TAATTATTAG	ATCATAGTAC	CATTTATATA	120
AAGTATTAGG	TTGGTGCAAA	AGTAATTGCG	GTTTTGGACC	GTGAATTTTA	AATCATTATA	180
AGTCGGCTCA	GACACGTCTT	TATTAATCAG	AGCAGGAAGC	ATTATAATCA	ACACATTTTT	240
GCCAATGAGA	AATAAGTTTG	TTCATTCCTG	TAGCTTAAAA	ATTCATGCTT	TGGGATTTGG	300
AAAGCATTTT	CTGCTTTCCA	AAAACCTGCT	GGTTTGGAA	GCATTTTCCT	TTCAAATAGT	360
TGTCGAGATG	CTTGAAGAAG	TGGTGGTTGA	CAAGAGGTCA	GGTGAATACG	GCGGCTCGAG	420

## (2) INFORMATION FOR SEQ ID NO:1134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC	TTCATGGCCT	AACTAGTCCT	GA CTGCTTAG	ACAAAGTCAT	AGATTATGTT	60
CCAGGCATTT	TCCNAGAAAA	CAGTTTTACA	ATCCAATACA	TTCTGGACAC	CAGTGATAAG	120
CTGAGTACTG	AGCTCTTTCA	GGACAAAAGT	GAAGAGGCTT	CCCTTGACCT	CGTGTTTGAG	180
CTGGTGAAAC	AGTTGCAGTA	CCACACTCAC	CAAGAGAACG	GAATTGAAAT	TTGCATGGAC	240
TTTCTGCAAG	GCACTTGTAT	TTATGGCAGG	GATTGTTTGA	AGCACCACAC	TGTCTTGCCA	300
TATCATTGGC	AGATCAAAAAG	AACAAC TAGC	TCGAG			335

## (2) INFORMATION FOR SEQ ID NO:1135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:



```

GAATTCGGCC TTCATGGCCT AGCAATTTT CCCTCAGGGG GGCTCCCATC TTCTTACACA      60
GAGAGGCAGC TGAGGCAGGA CAGTGGGGCT AACTGTAGAC CAGGCGAGGG CACGGGCTGC      120
TGGGGTGGCC CTGCTTCCCC AGTGACATA TTGTATCTGT GTAACATTTT GTATATTCCA      180
GGGGTAGGGC CGCCCCCTGT ATCATACCTA GCAGAGGTTG GAGCTGGCAC ATGGGGAGGA      240
GGTTCTAATA ATTATTTGGG GCTGGGAAAC TTATTTATTG ATAGCATAGG ACAGAGCCCA      300
CTCTCGAG                                     308

```

## (2) INFORMATION FOR SEQ ID NO:1136:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

```

GAATTCGGCC TTCATGGCCT ACCGAGGCTT CAGCGGGTGC CGCCCGCCTA GAGGGAGTGG      60
AGCGGCTAGA CAGCTTTAGG AACTGAAAGG TTCACGAGGC TGTAACGAAG AGTCGAGTTG      120
CTCCAGAGAG CCTACGACTA GATTTGCATC TTTACGTCCT GCGCGGAGGC TGCTACACAC      180
ATGCAGAAGT CATGCTGGTG GCCTGGACAG TGAAGGGAGA GAAGTGGATT TGGGAGACAT      240
TTAGGAGGAA CAGTAAGAGG ACCTTGTGCA TGAATAATTT GTTCCACAC TACAGAGTGG      300
GTAATAAGCA GATTAGTAAA AACAATTCTG CTTCACTTCA ATAACAGCCT CCTCCAATC      360
ATTTTCTC AACAACTTA TTTCCAGCA GAAGAATCCC AGACTTCTTA GAGAACCCAG      420
TGACTTTTTG CACCTTAAAT CTGTGAAATC CTCATGTTTT CTTCTGCCGT ATCCATAGTT      480
CAAACAAGAA CCTCGAG                                     497

```

## (2) INFORMATION FOR SEQ ID NO:1137:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```

GAATTCGGCC TTCATGGCCT ACAATTGTAT GCTGAAAAAT GGGAGTAACT ACATGAAATG      60
AGCAAATGCC TAGAAACAAA AAACCTACGA AGATTGTATC ATGAAGAAAT AGAAAATATG      120
AATAGACGTG TGTATTAGTC TGTTCTCACA CTGCTAATAA AGACGTACCC AAGACTGGGT      180
AATTTTTTTG TTTTAAGAA AAAAGAGGTT TAATGGACTC ACAGTTCCAC GTGGATGGGG      240
AGGCCTTATA ATCATGGCAG AAGGCAAACA GCACGTCTTA CATGGCAGCA GGCAAGAGAG      300
AATACTCGAG                                     310

```

## (2) INFORMATION FOR SEQ ID NO:1138:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 466 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC	TTCATGGCCT	AAGCAAATCA	CTTTTCCCGA	TTGAAAATAC	ACTTTACAAA	60
AGTGTTTTCA	GCTTTTGCAT	TGGTTAGGAC	TATACGGTAT	CTTTACAGAC	GGCTACAGCG	120
GATGTTAGGT	TTAAGAAGAG	GCTCTGAGAA	TGAAGACCTC	TGGGCAGAGA	GTGAAGGAAC	180
TGTGGCATGC	CTTGGTGCTG	AGGACCGAGC	AGCTACCTCA	GCAAAATCTT	GGCCAATATT	240
CTTGTTCTTG	GCTGTTATCC	TTGGTGGTCC	TTACCTCATT	TGGAACTAT	TGTCTACTCA	300
CAGTGATGAA	GTAACAGACA	GCATCAACTG	GGCAAGTGGT	GAGGATGACC	ATGTAGTTGC	360
CAGAGCAGAA	TATGATTTTG	CTGCCGTATC	TGAAGAAGAA	ATTTCTTTCC	GGGCTGGTGA	420
TATGCTGAAC	TTAGCTCTCA	AAGAACAACA	ACCCAAAGCA	CTCGAG		466

## (2) INFORMATION FOR SEQ ID NO:1139:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 473 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC	TTCATGGCCT	AATTTTTTTT	AATAGAGACG	AGGTCTTGCT	ATGTTGCCCA	60
GGCTGGTCCC	AAACTCCTGG	CCTCAAGCAG	TCCTCCACC	TTGGCCTCCC	AAAGTGCTGG	120
GATTATCAAT	ATGAGCCACC	ATGCCAGATT	TGTTCATTTT	TAAATATTTT	TATCTCTTCA	180
AGTCATCTTT	TGATCTTTTA	AAAAGCACCT	TCAAACAGCT	GCACCTTCCA	TTTGCACTAG	240
GAAATGAAGG	TAGTGATGGG	ATTGGCAATG	TTCTTGCCAG	ATGTTTCAGC	CCAAAAGCTC	300
TTCTACAGAC	CGGTTTAGAG	CTGGTGCCCT	ATGAGAATAT	TAGGGAGCTT	TTATTTTAAA	360
TTGAACTTTA	CCCTTGTCCT	TGCAAGGCAT	TCCTCCTGAA	TGCATCCATG	AATTTGTTTA	420
CTTTTGCGTC	AAACATATGA	GCCATTGTCA	TGCTCAGCAT	GTGCCACCTC	GAG	473

## (2) INFORMATION FOR SEQ ID NO:1140:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC	TTCATGGCCT	AAATGAAGAT	CAGCTTCGTG	CAAAGGGTTA	TGACAAAACA	60
CCAGACTTCA	TTTTACAAGT	ACCAGTTGCT	GTAGAAGGGC	ACATAATTCA	CTGGATTGAA	120
AGCAAAGCCT	CATTTGGTGA	TGAATGTAGC	CACCACGCCT	ACCTGCATGA	CCAGTTCTGG	180
AGCTACTGGA	ATAGGGTCCC	AATATAACAG	ACAAATGGTG	AAACAGAGGG	ATACTCACTA	240
GGAAACAGAT	TTGGGCCAGG	CTTAGTCATC	TATTGGTATG	GATTTATCCA	GGAGCTGGAC	300
TGCAACCGGG	AAAGGGGCAT	CCTGCTCAAA	GCCTGTTTCC	CCACGTCCTC	GAG	353

## (2) INFORMATION FOR SEQ ID NO:1141:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 571 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

```

GAATTCGGCC TTCATGGNCT ACCAATTTCT CATGGTTCCC TAGGACCTTC CTAGCTCCCC      60
AGGGAAAGCC TNTGCTGTTT CCCTTGNTTT CTTTTCACTT GACAAACTCC TACTCAAAC      120
TCAAAACCCA ACTCAGGAAA CATCTCCCCT AGGAAGCTCT CCTTAACTTT TTCTGCTGGG      180
TCCCGCTGCC TCTGCTAAAG TCCACGTGAG GGAAGTCCAA GANGTTTGCT CTGTCTCACA      240
GATTGAGTGC CAAGAGGGCA GGGACNTCTC TTTGAGAGAG TTTAACCTCT GTAACATAAG      300
CAAGTTTACT TAATCACTGA TTAAACCACT TTGTGCCTCA GTTTCCCAT TTGTTAAGCA      360
TGAATTATCA CTGTCACTAT CTGCCAGGAC TGTGAAGGGG GTGTAAATGC ATGAACATCA      420
TAAAGTGCTT AGAAGCATGC CTGGTACAAA GAAAGTTCTC TAGGNAAACA ANAAACAAAC      480
AAAAAAAAAC AAAACAGAAA TGTATCTAGA GGTGAGATAC CAGTCCCACA TCGAGTGCAG      540
ATAATGGGCT AAGTAACCAA TGAGTCTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:1142:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

```

GAATTCGGCC TTCATGGCCT AGTAAGGAGA GCCTCTATCA AAGGGTGGCC TGGAGCAGAA      60
TATCAGGCTA TGTGTATTAG TTCGTTTCA CAGCTATGA AGAACTACCT GAGACTGGGT      120
AATTTATAAA GAAAAGAGGT TTGATTAACT CAGAGTTCCC ATGCTGGGG AGGCCTCAGG      180
AAACTTACAA TCATGGTGGA AGGCATGATA GCAGGAGGGG TGGAAAGAGG GGAGTGTAC      240
ACTTTAAAC CATCAGATCT TGTGAGAACT CACTCACTAT CATGAGAATA GCAAGGGAGA      300
AATCCACCAA CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1143:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 442 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

```

GAATTCGGCC TTCATGGCCT ACTCAAGCGT TTCAGTGTGC GATATCTGCG ACTGCTCGCA      60
GTCTTGCTCT CCTTGGTTCT CCCCTGGGG CTCAGGATTA CGAGGCCTGA AGCTCCTAGA      120
GGCTAAATGC CAGGGGGATG GAGTGAGCTA CGAGGAAACC ACTATTCCCC GACCCAGCGC      180
CTACCACAAT CTGTTTGAT TACCACTGAT TAATCGTCNA GATGCTGAGG TGGTACTGAC      240
GAGTCGTGAG CTTGACAGCC TGGCCTTGAA CCAGTCCACG GGGCTGCCTA CCCTTACTCT      300
ACCCCGAGGA ACGACCTGCT TACCCCTGC CTTACTCCCT TACCTGGAAC AGTTCCGGCG      360
GATTGTATTC TGGTTGGGG ATGACCTTCG GTCCTGGGAA GCCGCAAGT TGTTCGACG      420
AAACTGAGC CCCAACTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1144:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC	TTCATGGCCT	ACCATCTACA	GCTGTATTCT	TGTTCCCTTG	ATGGCACAAT	60
TAAACTGTGG	GACTATATAG	ATGGCATCTT	AATAAAGACT	TTCATAGTTG	GATGTAAACT	120
TCATGCCCTC	TTTACTCTTG	CCCAAGCTGA	GGATTCTGTC	TTTGTTATAG	TGAATAAAGA	180
AAAACCAGAT	ATATTTTCAGC	TGGTTTCAGT	GAAACTGCCA	AAATCCTCAA	GCCAGGAAGT	240
AGAAGCCAAG	GAGCTGTCCT	TTGTTTGGGA	TTACATAAAC	CAGTCACCCA	AGTGCATTGC	300
CTTTGGAAAC	GAGGGAGTAT	ATGTTGCGCA	GTACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC	TTCATGGCCT	AGGCCAGGGG	ACCCGGCCTC	AGGTCTGTGG	AGGTGCTTCA	60
ACAGCACGAT	GCTCATTCTC	TGTCCGTAGT	GTCTCCATAT	ACTTTCTCAT	CTTCTCCACC	120
ATCCAGGAGG	GTAGGACAAA	GGATTTCAT	TCCTCTAGCT	TCAGATCCAG	GCATCCTCTG	180
TAATCATCAC	TGGCCGCAAG	GTCCCGGATG	TCCTCCTCGA	TGAGGAGGTA	GGCCATCTTG	240
CCCCCTGTTG	CCGCGATGTG	ATGCTGCTCA	GCCAGCCAGT	GCTTATCCTG	GGGGTCAGCT	300
GCATACTTAA	AGAGGTGTGG	GTGCTTGATG	TAGATTCTTC	CTCTGGTGCC	CCCCATCCCC	360
AGGGCTTTGT	TGGCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

GAATTCGGCC	TTCATGGCCT	AGGAAAGCTG	GGGGCAAGGA	AGAGCCTTGA	ATCTTGAGGT	60
GGGACGTTGA	CTCTAAGATG	TCCTTGAGCA	GTGGAGCCTC	CGGAGGGAAA	GGAGTGGATG	120
CAAACCCGGT	TGAGACATAC	GACAGTGGGG	ATGAATGGGA	CATTGGAGTA	GGGAATCTCA	180
TCATTGACCT	GGACGCCGAT	CTGGAAAAGG	ACCAGCAGAA	ACTGGAAATG	TCAGGCTCAA	240
AGGAGGTGGG	GATACCGGCT	CCCAATGCTG	TGGCCACACT	ACCAGACAAC	ATCAAGTTTG	300
TGACCCCACT	GCCAGGTCCT	CAAGGAAAGG	AAGGGCTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GAATTCGGCC	TTCATGGCCT	AGGGGGGGCC	ATCTTTAATT	CTGTAAGTTC	ATGGTAAAGG	60
TATCTCCCC	CACACTGGG	CAGGCGGCG	AATAAGCTCC	AGCGTTCATG	CGCCACTCAC	120
AGGACTGCTT	ACCCCCACTG	CACCTACAAT	GCAGTCACAG	AGTTACGGCA	TGTTACCCGG	180
TGTCCATGAC	AAGCAACACC	AAGTATAAAT	AACAGAACTA	CAGCAGAGCA	AACTAAGATA	240
AATATGTTTT	TGCATCGTCC	TCCACATAGT	TTCCTTTTAA	AAAGAAGAGT	CACATCCAGG	300
GGTCTATCCC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GAATTCGGCC	TTCATGGCCT	AGCTCTTTGG	GGAGCTGTTT	CAGAGGGAAA	GTGGATGAAG	60
GCTGAAGTGG	AGGCCAAATT	AGGTGCTCTA	GTACCCTCTC	TTGGATCTCT	TTCAGCTTTT	120
ACCTGTTTTA	TATGCTGGGA	TTTTATATAC	AACATTTTGC	AGAACTCAAC	TGCTAAAGTA	180
AAACGGTGGG	GAGGACTATT	GGATTGGGAG	ATCTCTAAAA	TCCCATTGGG	ATTGATGAAA	240
AAGAGAACTA	TCAGCAGAAA	AGAGGAAGGG	AACAAATGAG	TTGTTAGTAC	CTTAGTTCCT	300
AATTTATGTT	CCTTTATTGT	AGATTCTTTT	CTTGGCCACT	ACACTCCTTA	GAAATATAAT	360
TCAACACTGT	TTCTTTTACC	ATTTTGTATG	ATATGCAAAG	TCCAGCTTTA	CTCAGCCACA	420
TTTTGTCCAC	TGGCTTATAT	TTAATTATAT	TTTTAGGATA	CAGATAACTC	GAG	473

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGTC	TTCATGGCCT	ACTCTGGGTT	GCCTGTGGTC	ACTTCTGGTT	GCCTAGGACT	60
AGAAGGCTCA	GATTTTCAGT	GTCGGGACAC	TCCCATTCCT	CATCAAAGAA	GATCAATTGA	120
ATGCTGCACA	GAAAGGAACG	AATGTAATAA	AGACCTACAC	CCTACACTGC	CTCCATTGAA	180
AAACAGAGAT	TTTGTGTATG	GACCTATACA	CCACAGGGCT	TTACTTATAT	CTGTGACTGT	240
CTGTAGTTTG	CTCTTGGTCC	TTATCATATT	ATTTTGTTAC	TTCCGGTATA	AAAGACAAGA	300
AACCAGACAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GCCACGAAAG GTACCCCTGA ATTCTGGACT CATAAAATCT CTTAGATAAT ACATATTTGT	60
TGTTTTAACC CACTCAGTTT TGCATTGGTT ACACAGCAAT AGAAAATAAA GGAGGCAGAT	120
GAAATTGATG GAGAACAAATT GCAACGAAAA CAGAATACAC AATGCACGAG CCTGTGTCAG	180
GAATGACAGT GCATTCCACG GAAGAGTTGC ACAGAGAGAG ACGCCGCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC TTCATGGCCT AGCCTTTAAC ACTTGATATA AAATCCAAGC ATTTTTCAGA	60
CCTCAACCCA GAATAGTAGA TACCTGAAAT TAAGATTCCT ATTGGTGAGA AACAAGATCT	120
GTATATTTC CTATCCCTAT CCCCAAATGC CAGTGGGTCA TTTTCCCAT GCCTAGCTCC	180
ATTCACAGCT AATATGTGGA TTGAGGCTTT ATTCCAAAAC ATTTAGGTTT TATATTCTTC	240
CCTAGCCCTG ATTAGCAGTG CTCATCTTTG AAGATCATTG TGACTTTTCA GACTATTGTA	300
GTGATGGCTC AACCTGACCC CTTCTCCTCC TTTCAGGATT TGGCAGAGAG AACGGCCGCT	360
TCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC TTCATGGACA GCACAGTGGC CAAAGAAGGC ACTAATGTAC CATTAGTTGC	60
TGCTGTCCT TGTGATGATG AAGGCATTGT GACTAGCACA GGCGCNAAAG AGGAAGACGA	120
GGAAGGGGAG GATGTTGTGA CTAGTACTGG AAGAGGAAAT GAAATTGGGC ATGCTTCAAC	180
TTGTACAGGG TTAGGAGAAG AAAGTGAAGG GGTCTTGATT TGTGAAAGTG CAGAAGGGGA	240
CAGTCAGATT GGTACTGTGG TAGAGCATGT GGAAGCTGAG GCTGGAGCTG CCATCATGAA	300
TGCAAAATGAA AATAATGTTG ACAGCATGAG TGGCACAGAG AAAGGAAGTA AAGACACAGA	360
TATCTGCTCC AGTGCNAAAG GGAGTCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

```

GAATTCGGCC AAAGAGGCCT AGCACTTGTC TCATTTTAAT GTAAAGATT GCTTCCATTT      60
TCCTACAGGC AGTCTCTCTC TTCCTCACAG TCCCACTGTG CAGGTGCTAT TGTTACTCTT      120
ACGAATATTT TCAGTAATGT TATTTCTTC TAAGTGAAAT TTCTAGCCTG CACTTTGATG      180
TCATGTGTTT CCTTTGTCTT TCAAACCTCA AGGTTCCCCT GTGGNCCTCT CCCTTACCCT      240
GGGAAGGCCT CTTGGAGACC TTACCCCTTG CTGTTTGGAC TTTGTATACT TTAAATAATT      300
TAATACTACC TAATTACTTA AAAAAAAAAA AAAAAAGCTT TATGATTTTC ATAATTATT      360
GCTGATTTTA ATGGATTGTT AATTCAGTC CTGTAGTTT ATTTTATGTT TAGATAGGGC      420
TGGGCAAGGA AAAAGAAAAT AAAGACAACC ATACTCGAG                                459

```

## (2) INFORMATION FOR SEQ ID NO:1154:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

```

GAATTCGGCC AAAGAGGCCT ACTCCTTCAG ACTACAAGCT CCACAGAGCC GCGGGAGGAC      60
GGTTGCCTGG TATTATTAGC AAGCAGCAAA TATGGCGGTG GCGCGCGTGG ACGCGGCTTT      120
GCCTCCCGGA GAAGGATCAG TGGTCAATTG GTCAGGACAG GGACTACAGA AATTAGGTCC      180
AAATTTACCC TGTGAAGCTG ATATTCACAC TTTGATTCTG GATAAAAATC AGATTATTAA      240
ATTGGAATAA CTGGAGAAAT GCAAACGATT AATACAGTTA TCAGTAGCTA ATAATCGGCT      300
GGTTCGGATG ATGGGTGTGG CCAAGCTGAC GTTGCTTCGT GTATTAAAT TGCCTCATAA      360
TAGCATTGGC TGTGTGGAAG GGCTCTCGAG                                390

```

## (2) INFORMATION FOR SEQ ID NO:1155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

```

GAATTCGGCC AAAGAGGCCT ACGAATGTGG CCGGGTGGGA CCCGGACATA CGAGAGATTG      60
TCCTCATCGT GGCCATGATG ACATTGTCAA CTTGAGAGAG CAGGAGCAGG AGGGAGAGCA      120
GTACCGTTCC CAGAGGGACC CACTGGAGGG CAAGCGGGAC CGGAGCAAGG CCAGGTCTCC      180
GTACTCGCCA GCCGAGGAGG ATGCCTTGTT TATGGATTTA CCCACTGGCC CAAGAGGCCA      240
GCAGGCACAG CCCCAACGGG CAGAGAAGAA TGGAAATGCTG CCTGCCTCAT ATGGCCCAGG      300
AGAACAGAAAT GGGACTGGTG GGTACCAGCG GGCCTTTCCT CCCAGGACCA ACCCTGAAAA      360
ACACAGCCAA AGGAAGAGCA ATCTGGCCCA GGTGGAGCAC TGGGCAAGGG CCCAGAAAGG      420
GGATAGCAGG AGTCTTCCCT TGGACCAGAC GCTTCCTCGC CAGGGTCTCG GCCAATCCCT      480
GTCCTTCCCA GAAACTACC AGACTCTTCC CAAGAGCACC CGAAACGCCT CGAG                                534

```

## (2) INFORMATION FOR SEQ ID NO:1156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

```
GAATTCGGCC AAAGAGGCCT AATGGATCTA GTCACTTTCA GATTTC AATT TGAGGTTAAG      60
TATATAAAGC ACATCCCAAT TTTATATGCT GCCTTGAGAA AATTACAGGA TGCACGGCAA      120
TTTGTAGGAA TTTCAAATGG GATCATTTAA ACATTGAAA AATTATTTTA AAAACCATCT      180
AGTTTGCTTT TGGATTTTAG ACATTAAAGC CTATGTTGTC TTGTTAACAG GGGTGGAATG      240
TATAACCATC AGATTCAGCA TGTGATTTCA CCTTTGAATC TGAGTATTTC TTCCCTATCT      300
TCTTTGAGTC ATTTTGGAG CAGACTGTCA CCAGTATTGA TAACTAAGCA TTAAAGGGAA      360
AAGTTGCATT GCAACTATGC ATTGGTTTCC TGAAGAAGCT TTTCTTTTGT TTTAGTGAAT      420
GAAGAGGCCT GATGGGATCA CTTACTGTAA CTCCTTCTAC ATAAGGACCC CTCTGCAAG      480
CAGAACACAA AAGAACACGC TCGAG                                         505
```

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

```
GAATTCGGCC AAAGAGGCCT ATGTTATTGG GAAGGACCCA GAGAACAAAA AGTTGAATAC      60
GGAAAAGAAA ATAGGATTGG CAAGAAGCAC NTTTTTTTTT TTTTTTTTTT TTNGAGACA      120
AANTCTCGNT TTGCANTCCA GCCTGGGTGA CAAGAGCAAA ACCTNGTNTC CAAGNAAAAA      180
AAAATACAGT TTTGGTGATA ATACAGTTTG AAAGTAATTA GCATGTGGAT AGTCATAGAA      240
ACCACAGGCA TCAATGAAAC TGGCTAGGAG AAAGGACACC AAGAGGAAAT GGCCAGAGGT      300
AACAGGAAAA TCAGGGGAGT GTGGTTCACA GAAGCCTGGG AAGTGCTATT TCAAGAAGAG      360
AGTGGGTGGA AATTGTTAAG TGTCTAATGC TGCTCAGAAG CCAAGCAAGA TAAAGACAGA      420
AGAATCTAGT GGGAACTCGA G                                         441
```

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

```
GAATTCGGCC AAAGAGGCCT AGCAGAACCC GACCAGGGGA GCCTTGCCTG TGTGTTTCAG      60
GTGCTCTGCG ACCACTTCTA TAAAACCTAA AAAAGGAGAT TGCTCTGATT GCAACAGGTG      120
TGGGGGACCA GTATCCCATC CCATTGGCCC TGCCCTCCCA CCTGTAAGGC AGAATATGGT      180
TGGGAAATCA TTGCCATATG CAGAAGGGGT CACTGAGGGG TTTTAAACAA CAGTGACATG      240
CTCAGTTCTC TGGGTTGAGG CATCATCACC CTGGTGGCCA TGTGGAGGAT GGAAGTGGAA      300
AGGCATTGAG TTAGAAGACC TCTGCAGGAG TCCAAGGAAG AAACAGGCAA ATCTGCAGGA      360
GGCAGGCATA TCCAAGCTCG AG                                         382
```

(2) INFORMATION FOR SEQ ID NO:1159:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

```
GAATTCGGCC AAAGAGGCCT AGCCTCGGTG ATTTCCAGTG GAAGAATGTA GGTCCCAATA      60
CCACAAGCAC AGTCATTAGC ACAGATGCTT TTAGGCCAGG AGTCGATAT GACTTCAGAA      120
TTTATGGGTT ATCTACAAA AGGATTGCTT GTTTATTAGA GAAAAAAAC AGGATACTCT      180
CAGGAACCTG CTCCTTCAGA CAACCCTCAC GTGCTGGTGG ATACATTGAC ATCCCACTCC      240
TTCACCTGTA GTTGAAAGA TTA CTCTACT GAATCTCAAC CTGGTTTTAT ACAAGGGTAC      300
CATGTCTATC TGAAATCCAA GGCAGGCGAG TGCCACACCG ATCTCGAG      348
```

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

```
GAATTCGGCC AAAGAGGCCT AGAAAACTG AAAAAATAAG AAACCTTGA GAAAAGAGG      60
AATCAGTGCA GGCTAGGGGA ATGAACTTGG TAATCCAGTA GTCTTCCCT GCCAGCATTT      120
TGATTGATAA GCTAAGTGTC TGCTTTTCT CATCCCTTAT TTTTGGCAG GAAACCAGTA      180
TTTTGATACT TGAATGCCTT CTTTCTATCT TAAGGGAGAA GCCTTCTTAA ACTTCAAGTG      240
TGAAGTAGAT CCTTTAGGTA TAGGATGAAA AATTAAGTGG GACTATTTGT GAATTACTAA      300
ATCGCAACTC GAG      313
```

(2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 92 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```
GAATTCGGCC AAAGAGGCCT AGGAGCCTAG AAAAGAAGAA AGGTCTATTT TTATAAAAC      60
TGATGAAATA CTTGTGGCAG GGAGTCCTCG AG      92
```

(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 296 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

GAATTCGGCA AAAGAGGCCT AGTGCATAAG GAATCACTGT GTACAAACTG GCCAAGTGCT	60
TCTGTAGATA ACGTCAGTGG AGTAAATATT CGACAGGCCA TAACTTGAGT CTATTGCCTT	120
GCCTTTATTA CATGTACATT TTGAATTCTG TGACCAGTGA TTTGGGTTT ATTTTGTATT	180
TGCAGGGTTT GTCATTAAATA ATTAATGCCC CTCTCTTACA GAACACTCCT ATTTGTACCT	240
CAACAAATGC AAATTTTCCC CGTTTGCCCT ACGCCCTTT TGATACACCA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

GAATTCGGCC AAAGAGGCCT ATTAAAAATA AGTGTCTAAT ACTGTGTATT CATATAGCCT	60
TTATATCTCA ATACGTGCTT ATCTGTTGGT ATACCTTAGA GAAATAACCC ACCATCAATG	120
AGAAGAAGGA AAGGCAGGAG GAAAAAAGTT TATATAACAC TTAAATATGG TAGATTATTT	180
GTGGCCATTT GAATTTACTG ATTTGAAGTT CTTAAAGATG CTGAGCCATG CCTTACATAG	240
TTATTTTAGA ATCTAAAGTT GTTCTGTATT TGCATAACGT TTCTGTTCTT TTTCTTCTTT	300
AAACCCTGAA AGTGATAGAT GGGGAAGGAG AACCAGATAT TTGGCATGGT CTGACAAAAA	360
TTAACTTGTC AACTCGAG	378

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

GAATTCGGCC AAAGAGGCCT ACTCCAGGGT ACTTTTCCCC TAGGCCTGAC CTTTGTAGTGT	60
CTTTTGTGCC ANACATATTT AAGACCAGAG GAAAAAAGCA ATTGCTTTAG TTTCTATGTT	120
TGGGTAACAA AATCTACCCA CAGACAAGAG AATAACAAAA ACCAAACAGT ACAGTGGGAA	180
ATATACCAGA AAGGAAAAAA AAGATCATCA CATTAAATGT AAATGAGGTA AATTTTATA	240
ATAAAGAATC TTTTATGAAG AATGTCTCAA ACCAAATATT GTACTTTCCA ATTTCTTGGG	300
CACTGGGGAT GCTGAAGTGT AGTTAGATGA GTATATAACC CTATAGGGCT CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC AAAGAGGCCT AGTCTTCTGC CCCCTATGA AGTTTGAGTT TCAGCCCCAC      60
ATGGGGGATA TGGCTTCCCA GCTCTGTGCC CAGCAGCCTG TCCAGAGTGA GCTGGTACAG      120
AGATGCCAAC AACTGCAGTC TCGCTTATCC ACTCTAAAGA TTGAAAACGA AGAGGTAAAG      180
AAGACAATGG AGGCCACCCT GCAAACCATC CAGGACATTG TGA CTGTCTGA GGACTTTGAT      240
GTGTCTGACT GCTTCCAGTA CAGCAACTCC ATGGAGTCCG TCAAGTCCAC GGTCTCTGAA      300
ACCTTCATGA GCAAGCCCAG CATTGCTAAG AGGAGAGCCA ACCAGCAAAT CCTCGAG      357

```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGACAGGCGG ACCCAGAGAG ACTTGCAGTA CGTGGAGAAG      60
ATGGAGAACC AAATGAAAGG ACTGGAGTCC AAGTTCAAAC AGGTGGAGGA GAGTCATAAG      120
CAACACCTGG CCAGGCAGTT TAAGGGCTAA CTTAAAGAG TTTTTCAT GCTGCAGTGA      180
CTGAAGAAGC AGTCCACTCC CATGTAACCA TGAAAGAGAG CCAGAGAGCT TTTTGCACCA      240
TGCATTTTTA CTATTATTTT CCAATACTTA GCACCATTTT ACTAAGGAAC CTTGAATACA      300
ACGAGGATCC TCCTTTCAT GCGACTGTAG CTGCATTTC TGAATAGTTT GAACCCTTGT      360
CAATGCAATC TCGAG      375

```

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GGCTTATTGA TGACTCTTAT TTAAATTATG TTTTTCAGCA TGATAAGTTA CAATATAATA      60
GCTGGAGATA CTTTGAGCAA AGTTTTCCTA AGAATCCCAG GAGTTGATCC TGAAAACGTG      120
TTTATTGGTC GCCACTTCAT TATTGGACTT TCCACAGTTA CCTTTACTCT GCCTTTATCC      180
TTGTACCGAA ATATAGCAAA GCTTGGAAAG GTCTCCCTCA TCTCTACAGG TTTAACAAC      240
CTGATTCTTG GAATTGTAAT GGCAAGGGCA ATTTCACTGG GTCCACACAT ACCAAAAACA      300
GAAGACGCTT GGGTATTTGC AAAGCCCAAT GCCATTCAAG CGGTCGGGGT TATGTCTTTT      360
GGGGACGTTT TCGAG      375

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 552 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (x1) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGTCTC TGCAATCTGA AAATAGTGCC TTTTACCAAG AAGAGGACAG      60
AATTGGCGTT TGGAAGGCTG AGGGTCATGG TGTAAGGGCT TTTGAGTCAA AATCTTGGTG      120
TCAAGCAGAT GAGGCTGCAA CACAGACCTG TGACCAAACCT TGTGTGGAGC GTGTGGTGGG      180
CACGCAGGGG ACTGTGCAGA GGACAGATGG CCTAAAGCTT AGCATGGCAC AAGGAGTGCC      240
CCCCGATGGC AAGTCTCCCA GTCAACTCCA GATCTCTTCA CAGTAACTGT GTTTCCTCCG      300
CATTATTTT CAACCTGCAC AGAGGAAGAA GAGAGGAAA CAAGCCCAGG TGACAAAACA      360
GAGGGTGAAA TATGTGTGAA GAGTTCAGTC AGTGTGTAC GAGACCAGCT GAGTGACCCT      420
CAAAGGTTAG AAGGTAGTGA AAAAGAATCA CTGCAAGCAA AGTATAGTGA GACAAGTGAA      480
GATGACATAG AGACTGTCAA GTCAGATTCT AAAACAACCT ATGAGTGGGA AACAGGNACA      540
CAAAAACTCG AG                                     552

```

## (2) INFORMATION FOR SEQ ID NO:1169:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AGAGCGGAGT AAATTCTCCA CAAGCTGGGA ACAAACCTCG      60
TCCCAACTCC CACCCACCGG CGTTTCTCCA GCTCGATCTG GAGGCTGCTT CGCCAGTGTG      120
GGACGCAGCT GACGCCCCTT TATTAGCTCT CGCTGCGTCG CCCCGGCTCA GAAGCTCCGT      180
GGCGGCGGCG ACCGTGACGA GAAGCCCACG GCCAGCTCAG TTTTCTTCTA CTTTGGGAGA      240
GAGAGAAAGT CAGATGCCCC TTTTAAACTC CCTCTTCAAA ACTCATCTCC TGGGTGACTG      300
AGTTAATAGA GTGGATACAA CCTTGCTGAA GATGAAGAAT ATACCATATT GAGGATATTT      360
TTTTTCTTTT TTTTTCAG TCTTGATTG TGGCTTACCT CAAGTTACCA TTTTTCAGTC      420
AAGTCTGTTT GTTTGCTTCT TCAGAAATGT TTTTACAAT CTCAAGAAAA AATATGTCCT      480
AGAAATTGAG TTTACTGTTG CTTGTATTG GACTCATTTG GGGATTGATG TTAAGTCACT      540
ATACTTTTCA ACAACCAGAA CTCGAG                                     566

```

## (2) INFORMATION FOR SEQ ID NO:1170:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GAATTCGGCC AAAGAGGCCT AGGGAGTCAA TCATGATCNT TTCATATATG CTGGCNATAG      60
AAAATGGTCT CGGTGAAGTA ATGGTCTGTC TGTCAAGCAT GACATCCTTG CCTGTGTTAA      120
GTTTTTGTG CTCTTCTGGG ATGTTGATCG TGACGTCTTG TCCGGGATTG AGAAGCTTCT      180
GTTGCTCTTC TGGGATGTCA TTCATGATCT CTTTATATAT GCTGGCTATA GAAATTGGGC      240
TCTGTGAAGA AATAGTGTGT CCAAAACCTT GGTACAGGCC CCCTGGGGAG GGTACCTTTG      300
AAGAACCAGA AGTTAGATCT TGTGAAGAAG AAGAAAGTAG GCTCGAG                                     347

```

## (2) INFORMATION FOR SEQ ID NO:1171:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCGGCC TTCATGGCCT ACTTTTTGGG GACTGGTACT GGAGAAAAAT CTGAGAGCAA	60
AAGTGCTTGG CTAAATTCCC TTTTTTTCT TTTAGTTTTT GAAATCATGA ATCCTGTTTA	120
TAGTCCTGGA TCTTCTGGGG TTCCCTATGC AAATGCCAAA GGAATTGGTT ATCCAGCTGG	180
TTTTCCCATG GGCTATGCAG CAGCAGCTCC CTGCCTATTG TCCTAACATG TATCCTGGAG	240
CGAATCTTAC CTTCCAAACA GGTTACACTC CTGGCACACC TTACAAAGTG TCCTGTTCCT	300
CCACCAGCGG GGCTGTGCCA CCGTACGTCC CCCTCGAG	338

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 294 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAATTCGGCC TTCATAATCT CCTGCTCTTG AGAATGTGCC GATATGTCAA AATATCTACT	60
GAAACTGAAG AACTGAAGG ATCCCTACAC TGCTGTAAGG ACCAAAATAT TAATGGGAAT	120
GGCCCAAATG GCATACATGA AGAAGGCTCA CCAAGTGAAA TGGAACAGA TGAGCCAGAT	180
GATGAATCCA GCCAGGATCA AGAACTTCCC TCAGAGAATG AAAACAGTCA GTCTGAAGAT	240
TCAGTTGGAG GAGATAATGA TTCTGAAAAT GGATTATGTA CCGGATACT CGAG	294

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 286 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT ACATAAAAGA ACGAAAAGGA AGGAACTTCA GTCAACATAT	60
TTTCATTGAC TCCTTAGTAC AAGGGAACCT TAATGACCAA CAGATCCTAG AAGACAGTAT	120
GATATTTTCT CTGGCCAGTT GCATAATAAC TGCAAAATTG TGTACCTGGG CAATCTGTTT	180
TTTAACCACC TCTGAAGAAG TTCAAAAAAA ATTATATGAA GAGATAAACC AAGTTTTTGG	240
AAATGGTCCT GTTACTCCAG AGAAAATTGA GCAGCTCAGA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 421 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAATTCGGCC TTCATGGCCT AAATATGAAA AGACTAGACA TACAGAGATA TTTATCATAG	60
CAAAAAGTTG CAAGTACTGG GGATTGACAA AATTATCACA ATGGTTATAT TATTATTATT	120
ATTATTATTA TTATTTAATC AATCAGTGTC TTGCTTTGTT GCCCAGACTG GTTTCAAATC	180
CCTGGCCTCA CGTGATCCTC CCGCCTCAGC TTCCCAAATT GCTGGGATTA CAGGCATGAA	240
CCACCGCGCC TGGCCTATTG TTCTGCCACA TCTTTCTTTT ATTTTGTAGA GAGAGTCTTG	300
CTTAGTCCAG GCTGGAGTAG AGTTGTGCCG TCATAGCTCA CTGCAGTCTC AATTCTTGG	360
GCTCAAGCAA TCCTCCTGCC TCAGCCTCTT GAGTAGCTGG GAATACAGGC AACTCTCGA	420
G	421

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TCATGGCCTA GTGCTTAAAA GCTGTTCTCA TAAGAATTCT ACTGGCCTGT	60
ATCTACCCAA CCACTTTCTA TACCTCTCTT CCAACCAAAA GTCTTAATAT GGAATATCC	120
CTCACCACGA TCCTAATACT GTCAGTAGCT GTCCTGCTGT CCACAGCAGC CCCTCCGAGC	180
TGCCGTGAGT GTTATCAGTC TTTGCACTAC AGAGGGGAGA TGCAACAATA CTTTACTTAC	240
CATACTCATA TAGAAAGATC CTGTTATGGA AACTTAATCG AGGAATGTGT TGAATCAGGA	300
AAGAGTTATT ATAAAGTAAA GAATCCAGGT GCACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

GAATTCGGCC TTCATGGCCT AGGGTCACCG GGTTCGGGCG TAAAGAAGCC CCCGCGCTCC	60
CTAGAATCCA GGAACGGGGA CTGGCAGAGG CCTGGGTAGG AGTCCATTGG GCTGCTGGAG	120
GGCAGATTGC CCAAAGGGAG TCCACCTTGA AGAAAGGGCC TCTGCAGTGG CGTACGGCTG	180
CCTTNTAGGC CAGGGGTTCC ACAACCCAGA TGCTGTTCTC GTTCAGAGCC CAGAACATCC	240
TTGAAGAGCT GCTGCAGGTC CTTGGATTCC ATCTTGGGCA GTTCTCTGTG GAAATCCTGT	300
CTAAGTCAGA GCTAAGCATC CCTTCACCTG GGGTGCCTGG CTTCTCAGGG TCACTGGGCA	360
CTGGGGATGC CTTACGCCCC CCATCCTCAG GTCCTGGTGT ATCGGCTTTG CCCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```
GAATTCGGCC TTCATGGCCT AAAGAACCCC GTGGTGATGG TGGACGAGAT TATGAGCTCC      60
AGCCCTCCCA AGTTCACCTT CCCTGAAGCA GGCTTACGAA TCATGATCAC CAATAAGTTT      120
GGACCTAGGA CCCGACTACG GATGGCCAGC AGGATCATCA TTAATGAGCG GCAGAGACTG      180
ATCAACTCGG CCAATGGTGT GAGCAGTAAG CCGCTTCAAA ACGGGAGGCA CGAGAACATT      240
GAGAACGGGA ATGTTCTGTG GAAAAACCCC GAAGACCCTC AGCAGAATCA GGAGCAGCAG      300
CCGCCGCCAC AGCCACCACC GCCAGAGCCA GAGCCGGTGG AGGCTGACTT CCTGTCCCCC      360
TTCTCCGTGC CGGGCTGGAG TGTAGTGCCA TGATCTCCGC TGA CTGCAAC CTCCGCTTCC      420
CGGGACTCTC GAG                                     433
```

(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```
GAATTCGGCC TTCATGGCCT AGTTGTTGTA AGCATATTTA IGGTAATTTG TTACTGCACC      60
CTTGGGAAAC TAACACACCA AGGTTTCATGG ACAGCATGAA AAAGAAAAAC CATAGGCCAA      120
TATTTGTTAG GAAAAGACAC AAAAGATCTA AACAAATATT AGCTCCTACC CCTCCAAAAA      180
AGCAAATTCA ATCCAGTAAG GCATTGAAA AATATGTCAAT GACTAATGAA CTTATTTAAG      240
TTTACCCAC AATACAAGGA TGGTTTAAAT TTTACAAAAA GTATTCATTT AATTCATCAT      300
ATTGATAAAG GAGGAAATTT AATTAAGATA ATCTCTTGAT TGTCTCTTCA TATCTTTTGA      360
TTATCTCGAG                                     370
```

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```
GAATTCGGCC TTCATGGCCT AAAAAATACA AAAAAAAAC NNNANNGAAG AAAAAAGAAA      60
AAACTACCAG CCTGAAAATG CATAGTGTTT GCTACCTTAT TGCTTTTAGC ACATCTAGAA      120
AGACACTAAA CCCAGTGAGA TTGCAAGTTT CAAAATATTG TGTGTATAT GGCTTTGCTT      180
AAACGGATAT ATTTGTTTCT GAGTGAAAAC TTTTACGTA GAGGTTTATT TGTAAGGCT      240
TGTAAGCTTA AGTGTAAGTT TTAGTGTTG TGTTAAGTTG TTCTTACCCC GCATTAGCAC      300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 605 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```

GAATTCGGCC TTCATGGCCT AGCTGGGAGG TGTAGGTTGT AGCGAGCCGA GATCAGGCCA    60
CTGCACTCCA GCCTGGGCAC TATTGAGCAC TGAGTGAACG AGACTCCGTC TGCAATCCTG    120
GCACCTCGGG AGGCTGAGGC TGGCGGATCA CTCGCGGTTA AGGGCTGGAG ACCGGCCCCG    180
CCAACACAGC GAAACCCCGT CTCCACCAAA ACCAGTCAGG CGTGGTGGCG CGTGCCCTGCA    240
ATCGCAGGCA CTCGGCAGGC TGAGGCAGGA GAATCAGGCA GGGAGGTTGC AGTGAGCCGA    300
GATGGCAGCA GTACAGTCCA GCTTCGGGCT CCGCATGAGA GGGAGACCGT GGAAAGAGAG    360
GGAAACCGTG GGGAGAGGGA GAGGGAGAGG GAGAGGGGAG CGATTCTGGT GTATCTTAAC    420
TTGGATTTCT ATCCTGTTTG GGTTCGCTCA GCTGAATCTA TAGGTTTGTG TATAATACCA    480
AAGTATTTTG TATTAGTGGT TACAACGCAA AGTTGGATCG TGAAGTCAAT TTTGTGGCTT    540
ATGACTAGTA TTATGATTGG TTTTAATAG AATAGAAAAT GAAAATATAT CCCAGGTATC    600
TCGAG                                         605

```

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```

GAATTCGGCC TTCATGGCCT AGGAGAGTGG TGATGGTGGC ACAACAATGT GAATGTAATT    60
AATGCTACTG AGTTGTATGC TTA AAAATGA AAAATTTTAT GTTATACACA TTTTATGACA    120
AAAATTAATA GATGTATTAA TAAGATTAAA TGGGTTGTTT TAATGTTCTG TTA AAAATCAA    180
ACGCTGAGGG CATTAAATAGA GATTCTTATT TACCCACATG TCCTTTTAAA ACAAGAACCC    240
TCTTTAATAT GTGTTTCTT CTGGTTTATA GAACATATTT TAAAACGGGC TTA CTATTCA    300
ATAATATCAA TTGATTATTG AGGAATACAA GTTAATTAAA TTGTGCAAGT CAGTTGTTTG    360
GCCTTACTTC ATGCTTTTGG TGAACACTGA TGCAGTACTA GAATTACTCT TTTTGATAAA    420
TTGCCAAAAG CAGGCCACCT CGAG                                         444

```

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

```

GAATTCGGCC TTCATGGCCT ACTGTTTCAA AAAAAAAAAA AGGAATCCAA AGAAAAAAAT    60
ACATCACCTG CAAAAGGTGA AGAGAGAAAG GAAGCTTTT CTCTAAAAAT GGTGCAGCTA    120
TCCTCTGAAC CAATTTCCTT CGGTTTAATG TACCTGTATC TTGGGGTTTT TTTCCACTTA    180
ATTTATCCTG GAGCTCTTTC CATAACAACA CTTGGAAAGC ACTCTCATCC TTTTTCCTACT    240
GCTGAACAGA ATTCCACTGT GCGGATGGAA CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs



TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCGGCC	TTCATGGCCT	AGCATGTTGA	GATAACTTCT	GGGATTAAAA	TAGTCTTTTG	60
CTTTACTTTT	TTGGTTTCCT	AAAACAACTT	TATTGACTTT	TAGTCCATAC	TGTTATATTT	120
TTGTCTTAAA	GAAAATTTAA	ACTACAAATA	CCAAAAGAAA	ACATTTTAAA	TTAGGGATG	180
AGACTTTGGT	GTATCGTGGG	TCTAGGTTTA	ATGAACACAT	CTGGGGTTAA	GTTGGCATT	240
CTTCACATCT	CCACACCCAC	ACCAACCATC	ACAGCCCCCC	AAAATCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 364 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGCC	TTCATGGCCT	AAGGGGAGGC	AGAGGCTGTA	GTGAGCCGAG	ATCGCGCCAC	60
TGTACTCCAG	CCTGGGCAAC	AACAGTGAAA	CTCCGTCTCC	AAAAAAAAAA	AAAAAAAAAA	120
AAACTTGT	TTCCCTTGT	AATTTGGTTT	TCCTAAAAAT	TTTAGTATTT	CTAGAGAACA	180
TTTTTTTCCC	AGGCTGTTAA	CTGGTCTGA	AAACAATCTT	ACAGTAAGTA	TAATTTAAAA	240
CATACCTCCT	TTTCCAAAAG	CTCATTGTGT	ACCAAGCAAG	CACGTCTGTA	GTAAAAATT	300
GTTACTGAGG	TTGGTTCAAG	GTAAGAAGAA	TGGAGAATAT	TTACAACATC	TTCAAATTCT	360
CGAG						364

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 384 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GAATTCGGCC	TTCATGGCCT	AGAGTAAAGG	TGGGATTACA	GGTGTGTGCC	ACCACGCCTG	60
GCTAATTTTT	TTGTATTTTT	AGTAGAGACA	GGGTTTCACC	ATGTTGGCCA	GGCTGGTCTT	120
AAACTCCCGA	CTTCAAGTGA	TCTGTCCACC	TTGGCCTCCC	CAAGTGTGGG	ATTACAGGTA	180
TGAGTCACCA	AGCCCGGCCT	GTATCCTTTA	TTAAAAGAAA	CAAACAAACA	AACAAAAAAC	240
CCTTTTCTTG	ACTGACATCC	CTTTTCAGCT	GCAGCCCTGT	TTCTTTGCTA	CCTTTGTAGC	300
AAAATTCACT	AGGTTGTTCC	TACTTGCTGT	TTCCAGTTTT	TTGGTTTTTT	TCCTTTCCTA	360
GGAAATGAGA	GGCCCATGCT	CGAG				384

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

CTCGAGGGGG	TCAATTCCTG	GGGGCTCTTG	ATATTGCTCA	GAGCTCTGGA	GAAGTGTTC	60
TCCACTACGC	TGCTGATGTC	CCCTTGGAAG	TAGGTGAAAA	GGACACACCG	GGAATTCCAT	120
TCCGTCTTTA	TAGGCTTCTG	TTTGCCTTTG	GGCAGCCGGA	TGGCAGTCTT	CTTCATTCT	180
TCCATGTGTA	GTGAATGACA	CAGGTGACAG	CTCTTAATTC	TGGACCATCA	CCTGATTCTG	240
TGGCTGGGAA	AAGATGGCCA	GAGCTGCCTG	GCTCACTTCA	GAGCAGGTTA	GTGCTTGCGG	300
AAGCAGGAGC	TGAGGATTG	TACTAGGCCA	TGAAGGCCGA	ATTC		344

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 0 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 394 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTCGGCC	TTCATGGCCT	AGCGATGGCT	CACATCAGCA	CTTTGGGAGG	CTGGGGCAAG	60
AGCATCACCT	GAAGCCAGGA	GTTCAAGCCC	AGCCTCGGCA	ACACAGTGAG	ATCTCATCTC	120
TACAAAAAT	TTAAAAATGA	GTTTGGCGTG	GTGGTACATA	ATCGTGTAGT	CCCTGCTACT	180
TGGGAAGCTG	AGGCGGAAGG	ATCACCTGGG	CTCAGAAGTT	CAAGGCTGCA	GTGAGCTATG	240
ACTGCACCAC	TGCACACCAG	CGTGGGTGAC	ACAGTGAGAG	CCTATTAAAA	AAAAAAACAA	300
AACCAATAAA	CCAAACAAAC	AAAACCTAAA	ATACAAAAAA	TTAGCTGGGC	GCAGAGGCAC	360
GGGCTGTAG	TCCCAGCTAC	AAAGAAACCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 355 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC	TTCATGGCCT	AGGAGATGTA	CCTGATAGCA	ANTTACCTEN	TCTCAGCTCA	60
AAATTCACCC	TTCAAAACCT	TTTCTACACC	AATGGATAGA	ATTCTGTCA	GCATTCTCT	120
TNNAACGTTG	AACACAATGT	TAAGCTTCCT	CAGTGAAGGA	CCCTAGATGG	ACATTGCAGG	180
AAGAAGGGAC	TTCCCCTGTT	GGACCTAGAG	GTTGTACCAG	CATTGTAGGT	GGGAGGACAT	240
CCACTGGCTC	TTTGCAATAG	CCATGTGTCC	ATAAAGTATA	GTTTCTCAGC	AATCTCATTG	300
CCCAGTCTAG	GCNTGGCAAT	CACCTCCTG	CAGCCTTATC	AACACATTGC	TCGAG	355

## (2) INFORMATION FOR SEQ ID NO:1190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 451 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GAATTCGGCC	TTCATGGCCT	ACTTGGAGAG	CCTCATGCCG	TCTCTACCTT	CGCACACTGG	60
TCAAGTATCT	GCTGAGCTTC	TTGGCCGCAA	GGATGCAGAA	ATAGGCTGAG	GGTCCATGGG	120
AAGAAAGACA	CAATGAGGCA	GTAGGAGGTG	GGAAGAAAAG	AAGACAGACT	TTCAAAATGG	180
AATTAGGCAC	TGGGGAGAGA	TCAGTTTCCC	CACATCAGGG	AGAAGAAGGT	ATAGGTGGGG	240
AAGGGGGTGG	CCAGGAGCAG	AAGGAAGAAG	ACTCAAGATG	GAAAGGGAGC	CGCTGTGCCT	300
GTGGCAATAC	CACCTGGAGA	GGTCGACTTC	ATACCTTCAA	GCCTTTTCCC	CTGGGCTTTT	360
GATTGTGTCT	GTGCCCCCTT	TCTTGTCTCT	TCTGCAGATG	CCCAGTAGGG	GCTACCTCAT	420
CCTCGTGCTG	TTCTTGTGTA	GCATTCTCGA	G			451

## (2) INFORMATION FOR SEQ ID NO:1191:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 338 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC	TTCATGGCCT	AACAGAGATG	GCTTAGACTT	CAAGACTTGA	TTTGTAGCTA	60
TGTTCTACCA	GCCTCCAGCT	GTCTATGCGT	TGGCCTCACG	CATGTCCCAA	ACGTGGTCCC	120
ACACATGTTT	ACACATTGGT	CCCACATATG	CTGAGAGTAA	TTACTTTCTA	TTCATCAGAG	180
GTCAGAATAG	AATAAAGAAT	GTTTATGTCA	TAGTATGACT	TTTtagGTGA	TTTGGAAAAG	240
CAAGAATATG	AATTCTATGA	AAAAAATCTA	TTAGGAAATT	ATGGAAATGA	CAGAATGCAG	300
AGGTATTTGG	AAATAGAAAA	AAAACGGGTG	ATCTCGAG			338

## (2) INFORMATION FOR SEQ ID NO:1192:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 322 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```

GAATTCGGCT TTCATGGCCT ACCGACCACA TTTCACCTCTC AAGCTGTAG GAATCCAGAT      60
GCAGGCCAAG TACAGCAGCA CGAGGGACAT GCTGGATGAT GATGGGGACA CCACCATGAG      120
CCTGCATTCT CAAGCCTCTG CCACAACCTG GCATCCAGAG CCCCAGCGCA CAGAGCACAG      180
GGCTCCCTCT TCAACGTGGC GACCAGTGGC CCTGACCCTG CTGACTTTGT GCTTGGTGCT      240
GCTGATAGGG CTGGCAGCCC TGGGGCTTTT GTTTTTTCAG TACTACCAGC TCTCCAATAC      300
TGGTCAAGAC ACCGCACTCG AG                                     322

```

## (2) INFORMATION FOR SEQ ID NO:1193:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```

CTCAGAGGGGT GCTGAGCATT TTTTTCATGA ACCTGTGGTC ATTCAATATGT CTTCTTTTGA      60
GATGTGTCTA TTCAGGTCCT TTGCTTATAT TTAAATCAAG TTATTTGTTT ACTATTGAGT      120
GAAAGAGTTC TTTATGTATT TTGGTTATTA GCCCCTTAAC AGATATATGT ATAGCTTGCA      180
AAATATTTTT CCCAGTCTGT GGGTTGTCTC TTCAATTGT TAATTCTTTT TTTTTTTTTT      240
GTTGCTGGGC AGAACGTTTT TAGTTTGATG CAATCCCATC TGTCTATTTT TGCTTTTGTT      300
GCCTGAGCTT TTGGGGTCAT AGCCAAAAAA TCCTTGCCCA AACAGCAGTG TTATGGAGCT      360
TTTCCCCTAA GTTTTtaggc CATGAAGGCC GAATTC                                     396

```

## (2) INFORMATION FOR SEQ ID NO:1194:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```

GAATTCGGCC AAAGAGGCCT AGGTAGGGAA TGCAAGCAGG CACTGGGGAG AAATNGGGCN      60
GGAAAGTAGT CTCATGGAAT AAGCCTTTTT TACTTTAATT CAGCATTTAT TGCTTTGATT      120
AAAAAATAAT TTCAAAAATC TTTCTGCTTA CTGAATAAAG AATGCNTTGG AAAGAACAAG      180
AATGGATAAA GGAGAGTGCT TAGGAGGCTC CTGGAGCAGG AAGAGGTGGT GGCGAATAGA      240
CTACCGGAGC AGTGGAGGGT GGAGATGGAG AGACGTGGAA AGACTGAAGA CATATCCTCG      300
AG                                     302

```

## (2) INFORMATION FOR SEQ ID NO:1195:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```

GAATTCGGCC AAAGAGGCCT ACTCAGAAAC ACAAGGGAAA GGACAGAAGA GGGACCGGGG      60

```

```

AGGAAGAGAG GAGAGAGA GGTATGTAAG GTGTTTAGTA CACAGT GCTCAAAATG 120
TGTCCACTCC CTCTGCCAGG AGAGAGCAGA AAGTCAGAAA GGAGAGGACA CCAATAGAGA 180
GGAAAGAAAG GGGCCAGGCG CCGTGGCTCA TGTCTGTAAT CCTAGCACTT TGAGAGGCAG 240
AGGTGGGAGG ATCGCTTGAG CCCGAGAGTT CGAGACCAGC CTGGCCAACG TAGAGAGACC 300
CTGTCTCTAC AAAAAATACA AAAATTAGGC TGGGTGCGGT GGCTCATTCC TGTAATTCCA 360
GCACTAGGGA GCTCGAG 377

```

## (2) INFORMATION FOR SEQ ID NO:1196:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```

GAATTCGGCC AAAGAGGCCT AGTGTTACAC AGCACTCACA CTAAAGATGA AAAATTCCAT 60
TAGCTCATCC TGGTCTTCT GCTTACTTAC CTAATCATCT GTTTATGATT TAAAAAATA 120
GGGTTACTGT GAAGAGAGTG CTTGTGTGTG AGACAGAGAG GGAGGGTGT TTTTCAAATG 180
TATAGAATAT ACCAATGTAG TTTTGGTTG GGTATTTTTT TAAATCATGA CTTTATTAAA 240
TTTACTTAAT TAATATTCAT TTTTATCCTT TTTTATGTT TTTAAAGTTT TTATTATTTA 300
TTAATTTATT TGAGATAAGG TCTTGCTCTG TCACCCTCGA G 341

```

## (2) INFORMATION FOR SEQ ID NO:1197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 363 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```

GAATTCGGCC AAAGAGGCCT ACAGAAATTT AAATTAATCT CTCATCCATT GGCTTTTGCT 60
ACTTTAGGTT AATATTAAAA TATAACATAC ATTTTGGGG TTTATGCTGT TAGTCCAAA 120
CCAAAAGATT TTGGAATTT ATTTTGGAAA TTTTGTGTTT AGAATATGAA TAAATCTGCT 180
TATTCAGAAA AATTAAACCT TGATAACTTG GGACCTCCTA TTCCTGTATG TTCTCTGACA 240
TACATTGAGG GATTTGGCTC TCTTTGTTT ATTTGTTTCTA CTAGTCAGAC ATTCCTTTGG 300
CTGCCCATAC TTAATTCTGT TGGGTGTTTC CGCCCCGCC CTCAGCTTCT GAAGCTACTC 360
GAG 363

```

## (2) INFORMATION FOR SEQ ID NO:1198:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 169 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GAATTCGGCC AAAGAGGCCT ACCTGACAAG TGTTAAGCAG ACACATAGAG AAAGTTAAAA 60

```

TTTGTTTTCTCCTTAAGA GTGAAGTTAA GGAATAAGAC CTATATGG ACACCATGTG 120  
ATGAGTGCTG TCATCAAAGC ATGGACAATG GGCTTTGAGA GTACTCGAG 169

## (2) INFORMATION FOR SEQ ID NO:1199:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 82 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

GAATTCGGCC AAAGAGGCCT ATAAAAACGT TATGTTATTT TTGGAAGTTT TTCTCATATC 60  
TCTGTTGCCA GGGTCACTCG AG 82

## (2) INFORMATION FOR SEQ ID NO:1200:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

GAATTCGGCC AAAGAGGCCT AAGGTGGTGC AGTGGGGACA GCACCTCCGA CCCTATGGGG 60  
TGTACCTTCA AGTAGCAAGG CTGACAATGA TGTCTAGAAA GGTCTCCACT TCTGCCTGAG 120  
TTTTGCCAAA CCCAGTGGTC TATAGGGATG TGGCAAAAGA ATGACCTACC GCAGTGTGAT 180  
TATCAGTGTT TTTTAAAATA AAGAGCACAG TTTGCCTTT AAAATAATTC ACATCAACGG 240  
TATTTGGGAG AACATGGAGC TGGCATAACA TTGGCGTAGA AAGCAGGGCC AGGCCCCACC 300  
ACGGGGCCCT CGTGTGGGGA CGGGTGCTG AGCCCCTGAG CCCCTCGAG 349

## (2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 318 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

GAATTCGGCC AAAGAGGCCT AGGGGAAGAG GTTCAAATGT GGGGCTGGAC GTGGCCTTGG 60  
GGTGGGATC CCTCACAAAN ANTTCGTCTT CATAATCTN ATGAGGTNGC GGGGAGTCCC 120  
GCAGGACAGA CTCAGATATT CGGAGGGAGA TCCTCCCTGG AGTGCTCGGG GCCCCAAGAG 180  
GTGTGTCTGG GTCAGAAGTG CTGCATAAAC TTGGAAGACT CTGCTGTTTT TGATAGTGCT 240  
TCAGGTTTGC AAAATCAGGG GCTGAGGATT CCTCAGGAAG GNTGTCCTCT CTGGCTGCGT 300  
GGGCCCCACTT TGCTCGAG 318

## (2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 293 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

GAATTCGGCC AAAGAGGCCT ACTACAAGAT AACTTCCCAG TACTTTAAAA AAGTCTCAAA	60
GTCATAAACA AGAAAGAACT GAGGGACTAT TGCATATTGG AGCGATCTAA AGAAGTATTA	120
CAATTTGTGG AATTCTTGAT TAAATCCTGG ACCAGCAAAA GGACATTAGT GGGAAAATTG	180
ATGAAATTCA AATGAGATCT TATATTGAAG TTAATTGTGT CAGTGTACAT TTCCTGGTTT	240
TCATAATTGC AAGTGATTAT GTAAGGTTTG TTAATATTGG GAGCAACCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 306 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

GAATTCGGCC AAAGAGGCCT AGTTTTGAGA AATAAATGGG ATAGCACGTG TAAATCACAT	60
AGAACAGTGC CTGGCACATA AACACTCAAT AAATGTTAAT TGATACTATA ATTTATCTAA	120
TTTATCTTTA TTCCTCCTGC AAAGATTCTT TGGACTATTT AGAATCTCTG GTCACCTAA	180
TGAGATGGTG GTGTTTTTTT TTGGTTTTTT TTTTTTTGTC TTAAAGAAGC TTCTGTAGAT	240
CAGCTGTAAT TTAGTGCTAA ATAATCTCTT GTAGTTATTA TTTTCAGTCT ACTTGGGATC	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 598 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT ACGAGATAAT ACTGGAGTCA ACTGTACATT AACTTGCTTG	60
GAGGGCTATG ATTTACAGAG AGGGTCTACT GACAAGTATT ATTGTGCTTA TGAAGATGGC	120
GTCTGGAAAC CAACATATAC CACTGAATGG CCAGACTGTG CCATTCTAG AAAAACGTTT	180
TGCAAACCAC GGGTTCAAGT CCTTTGAGAT GTTCTACAAA GCAGCTCGTT GTGATGACAC	240
AGATCTGATG AAGAAGTTTT CTGAAGCATT TGAGACGACC CTGGGAAAAA TGGTCCCATC	300
ATTTTGAGT GATGCAGAGG ACATTGACTG CAGACTGGAG GAGAACCTGA CCAAAAAATA	360
TTGCCTAGAA TATAATTATG ACTATGAAAA TGGCTTTGCA ATTGGACCAG GTGGCTGGGG	420
TGCAGCTAAT AGGCTGGATT ACTCTTACGA TGACTTCCTG GACACTGTGC AAGAAACAGC	480
CACAAGCATC GGCAATGCCA AGTCCTCAGG GATTAAAAGA AGTGCCCAT TATCTGACTA	540
TAAAATTAAG TTAATTTTAA ACATCACAGC TAGTGTGCCA TTACCCGATG ATCTCGAG	598

(2) INFORMATION FOR SEQ ID NO:1205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

```

GAATTCGGCC TTCATGGCCT AGTCTAACCA TTATGGAAAG AGAACAGTCC CTTCAATATC      60
CCACTATCTG TAGGGCATGA CACAGCCAAA TCCAAGTCAG ACCATCCCTT TGATCAATTT      120
CTACCAATAA CTGTTTCATTG CACACCCTGT ACAGAGCACT GCGACCAAGC TGTTCTTGA      180
CCTTCTCCTT TCCTAGTGTT TGGTCACAAC ACTCCCTAAA GCCCTAACTC AAGTTCTTGG      240
GATGATACCA CCAGAAGAGG GAAAAAAGGA GCCGTCTTCC TGAAGTCACC TGGGTAGAGC      300
AGCTGGGGAT TTTTCCCTCC TCGAG                                         325

```

## (2) INFORMATION FOR SEQ ID NO:1206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

```

GAATTCGGCC TTCATGGCCT ACCCACTGCA ATGATGTTTA CCAGCACTAT TAACTTACTG      60
CAGACTCTTT GTCTGTCTGC TGGAGTTCAT GCTGAGATCA TGCAGAGCGA AGCCACCAGA      120
CTCGAG                                         126

```

## (2) INFORMATION FOR SEQ ID NO:1207:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAATTCGGCC TTCATGGCCT ACTAATGTGG TTTTGTGAAG TTGGTGTCAG ATTTACGAGC      60
ATAAAATTGT TTGTAATATT CCCTTATATT CTTTAAAAC TGCTATAGGA TCTGTACTGA      120
TGTTCTGTTT CATACTGAT GTTTTGTGTC TTCTGTTTGT CTTTTTNGT TGTTGTGTTT      180
GTTGTTGTTA GTTTTGATAG AGGCTTACAA ATTTTTTGCT TAATTGATTT TCTCTATTTT      240
CCTCTTTTAT TTCTTCTTTT AATAATTCCT TCCTTCTTGC TTTGGCTTCA TTTTGCTCNT      300
TTTtagTTTC TTTTGTAAT TCAATTACTG GTTCGACATC TTTCTCGAG      349

```

## (2) INFORMATION FOR SEQ ID NO:1208:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 198 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

GAATTCGGCC TTCATGGCCT AGAGTGATTG TGGGTTATAA TAGAGCAGAT TGTTTTAAAA	60
AGAGACTTGT GAGCCAAGAC TAAATCCTGG TTTTACTATT TATTAATCTG TATAGCTATA	120
GCCAAGCTAT TAAAACTCCC TTATTTCTCA GTTTTTTCGT TCATGAAGTG GGTACAGTAC	180
CTAAAGGTTT ATGTTGAG	198

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

GAATTCGGCC TTCATGGCCT ACAGGGGATG ATTCAGTCCG ATACAGTCAG GGAACCGTAC	60
ATAGAATAGA ATGACTAGAG TATAATCTGC AAAGGATGGA ATGGCAGAAG TAGTCAGAAG	120
AGGTATGCAA TGGTTGGATC AAAAAGAGCT TTGTATCCAG CGTCACAGGG CCTCAAATTG	180
TACTGTAATC ATATGTCTTT TACCTGTTCT CTGGCATTTA AATATTCTTG TAAAGAGCTA	240
AGCCATTACT GATAAAATGT CTGTTGTGTA CAGTTGTACA AATTAAATTC AGTCACAAAA	300
CTGAAAGAAC AGCAGTGGGA CATCTATCCT AGTGAAAGTT AGAATACACT TTTGTGGTCT	360
TTAATAACAG AGTTGATTGT TTACCTTCTC CTTTGGTTAG AAGACTGGTA TGGGGATTGT	420
TTGGAATGAA GAGGTAGGAG AGAGAAATAA TTCAATTCTG TATTCTCCCA TCATCTTTAT	480
ATTTGAACTG AGAAATGTGT GTTCTATCA TTCATTCAA TTATTAAACA AAAACAGAGA	540
CTCGAG	546

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 314 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

GAATTCGGCC TTCATGGCCT AAAGATATTT TAGCTAACAG GAGAACGGCC CAAGGGGGCA	60
TTCTCATGTT AATTACCAAA TGTGGGCTTG TCAAAATCAA ATAGCTCCAG GAATAATGCA	120
AGTAGCTCTG CATCATTATA TTGTTTGGCC CTCAACCCAA TATTAGCTAC TTTTAAAT	180
CTGGGTTCAT TAGGCTTTTA AATTTAAAAG AGGAATCACT ATTGGGAGCC TTCAGAAGAA	240
TGTAAAGCAC AGCCAGCAGT GCCAGAGTTT AATGTAAATG ACATTAAAAA ATAGTTTCAT	300
ATCACACACT CGAG	314

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 416 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT ACGCATGAAA ATTACTTAAA CGTTGCACAC AACGTTTCAC      60
AAAATCTTTT GTGAAAGAAG AAAAGGAAAT TCAGTGTGTG AGTCTCAGCA GGAGTTAAGC      120
TAATGCAGCT TAAAAAATG CCGAAAAAGA AGCGCTTATC TCGGGGCAGA GTGCCCCTGA      180
TTCTCTTCTT GTGCCAGATG ATTAGTGCAC TGGAAGTACC TCTTGATCTG GTACAGCCTC      240
CAACCATCAC CCAACAGTCT CCAAAGATT ACATTATTGA CCCTCGGGAG AATATTGTAA      300
TCCAGTGTGA AGCCAAAGGG AAACCGCCCC CAAGCTTTTC CTGGACCCGT AATGGGACTC      360
ATTTTGACAT CGATAAAGAC CCTCTGGTCA CCATGAAGCC TGGCACAGGG CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AAGGGAAGCC TGAGCAGGCC AGTGGGCTGG GCGCAGAGCG      60
GGGTGTGGGG GCCAGGCTGT GTGACCATGA CAGAAAGAAC CCCAGCTAGC CCAGCTTGCT      120
CCCTGGGGCA GGACTACCA ACCCCGTGAG GGCCTGGGGT AACAGTGGTC CAGTGGCCAA      180
GACCAGCAGT CGCCAGGTAC CCACTGGCCA CAAACCAACC AGAATACTTG CCGCTGGAGG      240
CCCCAGCCCA GGGTCAACCC AGCCGCCGCC CTGTCTTTGT GTGTGGGTGG GTCAGCCCCA      300
TCCCTGCCTT TCGGACTAAA AACTCGAG                                328

```

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

```

GAATTCGGCC TTCATGGCCT AGAGGCATTA ATATATTTTA CATTACTGGG ACCATAGTAC      60
AGAAATTTCT AAATGGTTTG TAAAATAACT TGTTATTTGT GTTGTGTGTA AAGCAGTTAA      120
TACAAATGGA AACTCGTAA TAAGAAGATA CAGTTTAACA TCAAAAAGTT TACCCAAGGT      180
AATTATGAGT ACTACCTGGC AAAACTTCAC GGAAGCTGTG GTATCACTTT TATGATGGAA      240
GAATGGTGTT TGCATTTTGT GTAAAAGTAC TTGCGGCTGG GCGTGGTGGC TCATGTCCCA      300
GTGCTTTGGG AGGCGAAGGC AGGTGGATCA TCTGAGCCCA GGAGTTCGAG ACCAGCCTAG      360
GCAACGTGGC AAGAGCCTGT CTCTCCAAA CCTACAAAAT TTAGCCAAGC TTGGTGGTGT      420
GAGCCTGTAG TCCAGCTAC TTGGGAGACT CACGCTGGAG GATCTCTCGA G              471

```

(2) INFORMATION FOR SEQ ID NO:1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

```
GAATTCGGNC TTCATGGCCT AGTCAATGAA AGAATTCCTG CAGTTTCATT ACCTATGAAN      60
ATTGTGGGGT CCTCTTGTGG GACATGAAAG GGGGACAGAT AGATGAATAT TGTTTGGATT      120
TTTGGTCCTC AGTGCCATCC ACAGACTCCA GAAGGGATCA GCTATTGCTT GAACAATCTT      180
TCAGTTCTCA TAGAGCCCTG ATATGTTTTC AGGGTCCACA AATGCCTGTG ACGGTGGCCT      240
CAAGAACCCA GTGTCCCTT GTAGGTGGGA TAGCATACCT CTTAAAGGTC AGCATGAGAT      300
TCCACCCATG TCATCCCCAG CATTGGTGGG GTCAGCAGAT CCTCTCTCTG GGGTTTCNTT      360
TTCTGCTCAA CCTCCCTGCT TTGATGGACT GCACAGACAA GCCCCATCTT GGTGGAAGGG      420
TCTCCCATG GGGTGTCTG GAGGGTCACT CCCACAGATA TGCCCATCC TGGTGAAGG      480
GTCTCCCTGG GGGCTGTCTT GGAGGGTCAG TCCCACAGAC AAGCCCCATC CTGTGGGAGG      540
GTCTCCCGT GGGCCATCCT GGAGGGTCAG TCCCACAAAC TCGAG      585
```

(2) INFORMATION FOR SEQ ID NO:1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

```
GCGATTGAAT TCTAGACCTA CCTCGATAAC CCAAGAGACT ATGAGCAGAC ATGACATCAT      60
TGCATGGGTT AATGACATAG TATCTTTAAA CTACACAAAA GTGGAACAGC TTTGTTCAGG      120
AGCGGCCTAT TGCCAATTCA TGGACATGCT CTCCCTGGC TGCATTAGTT TGAAGAAAGT      180
AAAATTTCAA GCAAAGCTGG AACATGAATA TATTCACAAT TTAAACTTC TGCAAGCATC      240
ATTTAAGCGA ATGAACGTTG ATAAGGTAAT TCCAGTGGAG AAGCTAGTGA AAGGACGTTT      300
CCAGGACAAC CTGGATTTTA TTCAATGGTT TAAGAAATTC TATGATGCTA ACTACGATGG      360
GAAGGAGTAT GATCCTGTAG AGGCACGACA AGGGCAAGAT GCAATTCCTC CTCCTGACCC      420
TGGTGAACAG ATCTTCAACC TGCCAAAAAA GTCTCACCAT GCAAACTCCC CCACAGCAGG      480
TGCAGCTAAA TCAAGTCCAG CAGCTAAACC AGGATCCACA CTTCTCGAG      529
```

(2) INFORMATION FOR SEQ ID NO:1216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```
GAATTCGGCC TTCATGGCCT ATCGGCCCCG CGGCGGAGGG ANANGATCCT CCACAGTGCT      60
CTCTTCAGTN CCCCTTCAAA TGCTGTTTTA TCTCAGCGGA ANGTA CTACG CCCTGTATTT      120
CCTCGCCACG CTCCTGATGA TCACGTATAA AAGTCAGGTG TTCAGCTATC CTCACCGGTA      180
CCTGGTCCTC GATCTTGCTC TGCTGTTTCT GATGGGGATT CTAGAAGCAG TTCGGTTAAA      240
CCTGGATACA CCCCTGATGC CCGATGTCCA GTGAGGAACC AAGGCTGCGG GGAAGGGTGG      300
CCCCCACCCT TCCTCTTGTT ATCAGGCCTC AGACACACTA GGAGGATGGA GGCAGTTCTT      360
CTCAGCTGCC CATCCCACTG AGGGGTGCCG GGCCGTCAGT GTCTTGTTG CACTCACGTC      420
CCAGAACCTC TAGAGCTTGC CCCCAGGGC GGGCACTGCT GGGAGGGTGC GAGCACCGCT      480
GCGGCACAGA GGCCCGGTTT TTGGNTGATC TTCTGGGGCC TGGGCCTGCC CTGAGGTGGT      540
GGGGACAGGG TGTGGCCTGG CCCTGCTGGG GGCTGCTAGG CCAACGGGAC CCTCCCAAG      600
```

CGCGCCCGG ACTGCAGGTG CCTCGAG

627

## (2) INFORMATION FOR SEQ ID NO:1217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GCAAATATTG AACATAATCT AAAATCTGAG GAAGAAAAGG ATCAGGAAAA GCAACAGATG      60
TTTGAAAATA AGCTTATAAA ATCTGAAGAA ATTAAAGATA CTATTTTGCA AACAGTAGAT      120
TTAGTTTCTC AAGAGACTGG AGAAAAAGAG GCAAATATTC AGGCAGTTGA TAGTGAAGTT      180
GGGCTTACAA AGGAAGACAC CCAAGAGAAA TTGGGGGAAG ACGACAAAAC TCAAAAAGAT      240
GTGATCAGCA ATACAAGTGA TGTGATAGGA ACATGTGAGG CAGCAGATGT GGCTCAGAAA      300
CTGGATGAAG ACAGTGCTGA GGATACGCGA AGTAATGATG GGAAAGAAGT GGTCCGAAGTA      360
GGCCAGAAAT TAATTAATAA GCCCATGGTG GGTCTTGAGG CTGGTGGTAC TAAGGAAGTT      420
CCTATTAAAG AAATAGTTGA AATGAATGAA ATAGAAGAAG GTAAAAATAA GGAACAAGCA      480
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1218:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCGGCC TTCATGGCCT ATGAATTCTA GACCTGCCTC GAGATCTGAG CAGGAATTAC      60
TCTCAGATGA CGCTTCATCT GTTTCACAAA TTCAGTCTCA AACTCAGTCA CCGCAAAATG      120
TCCCTGAAAA ATTAGAAGAA AACCATGAGC TGTTTTCCAA GAGCTTCATC TCCATGGAAG      180
TGCCTGTCAT GGTAGTAAAT GGCAAGGATG ATATGCATGA TGTGGAAGAT GAGCTTGCTA      240
AGCGAGTGAG TAGGTTAAGC ACAAGTACAA CCATAGAAAA CATCGAGATT ACTATTAAGT      300
CTCCAGAGAA AATCGAAGAA GTCCTGTCAC CTGAAGGCTC CCCTTCAAAA TCGCCATCCA      360
AGAAAAAGAA GAAATTCCGC ACTCCTTCTT TTCTGAAAAA GAACAAAAAA AAGGAGAAAG      420
TTGAGGCCTA AATAAAGTCT TTTATAATT ATTATTATAA CAATGTGACA TTGCACATCT      480
AAATACCACA TCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1219:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```

GAATTCGGCC TTCATGGCCT AAAAGATGGC GGAGGTGCAG GTCCTGGTGC TTGATGGTCG      60

```